# THE DECROLY CLASS

## A CONTRIBUTION TO ELEMENTARY EDUCATION

AMÉLIE HAMAÏDE

Lila Anderson

Montessori

1. Teachers carefully observe Children + record what they did.
2. Leave children alone.

Chapter on Disciplane.

~~ad before Friday~~

Montessori system observed.

Riverside Series (publishers).

# THE DECROLY CLASS

Comparing the tadpole and the goldfish.

# THE DECROLY CLASS

## A Contribution to Elementary Education

BY

AMÉLIE HAMAÏDE

Collaborator with Dr. Decroly

With a Preface by ED. CLAPARÈDE, Professor of Child Psychology at the University of Geneva

Translated from the French by JEAN LEE HUNT

NEW YORK

E. P. DUTTON & COMPANY

681 Fifth Avenue

Copyright, 1924
By E. P. Dutton & Company

All Rights Reserved

Printed in the United States of America

To Miss Mabel Bragg
To Miss Fanneal Harrison
To Miss Catherine Gavin

*In appreciation of the work for child health they have so admirably accomplished in behalf of our Belgian children, and in token of the author's affectionate regard.*

## ACKNOWLEDGMENT

The numerous illustrations appearing in the following pages were originally made possible through the generosity of Mme. Boulboulle of Malines. The photographs from which they are taken are the work of those three advocates of Dr. Decroly's methods:

M. Nicaise, Professor of Physical Sciences at the Athenæum of Malines.

Mme. Menkes, Professor of Drawing in Dr. Decroly's school.

Mlle. Van Halme, teacher at Elementary School C. of the Brussels Public Schools.

THE translation of this study into English has been arranged through the co-operation of the C. R. B. Educational Foundation, Inc., established by the Commission for Relief in Belgium to promote the exchange of intellectual ideas between Belgium and the United States.

## TRANSLATOR'S PREFACE

To those who read this record of educational pioneering the reasons for making it available in an English translation will be apparent. Miss Hamaïde has written one of the few studies to be found in any language that affords a vivid and intimate account of experimental teaching—teaching that departs from the traditions of the conventional school, and seeks to approximate in actual practice some very fundamental principles of educational reform.

These principles are not new to our English-American literature of education, but as presented here they possess the essential attributes of newness. They are expressed in terms more or less new to our educational parlance—terms that hold attention and provoke thought the better from that fact, and that reflect something of the enthusiasm and conviction of discovery. For we have here the message of an original thinker. In a surprising measure Dr. Decroly's theories have been arrived at independently, by way of an experience more varied, more intimately concerned with the problems of individual development than has been the usual experience of the educator; and their interpretation in terms of school problems and techniques is singularly consistent and free from compromise.

It is this that makes the contribution of the Decroly class and the Decroly school so vital, so re-assuring. Recognition of the same fundamental truths by thinkers widely separated and differently circumstanced is, in itself, ever an inspiration, but is pre-eminently so when recognition comes as the result of an extensive and exacting practical experience.

So far as the varied suggestions contained in the following pages may be reduced to a single generalization, they may be said to constitute primarily a contri-

bution to the liberalization of education. That ill-defined ideal, "Freedom in the school," that has inspired so large a number of educational writers and so small a percentage of educational workers the world around, receives at Dr. Decroly's hands an interpretation of profound significance, whether one's alignment is with "the right" or with "the left wing" or, perchance, "the center." In Miss Hamaïde's pages freedom is discussed chiefly by implication, and by implication too, its interrelationship with affectivity and the emotional enlistment of the child becomes apparent. Efficiency, the usual stumbling block in liberalized procedure, is not in question here. Indeed nothing is more striking than the evident fruitfulness of the school experience described.

And what are the specific suggestions to be offered by the Decroly teaching? As the reader will soon recognize, its distinctive features derive from theories whose successful interpretation has invariably presented special difficulties to the teacher. Among these are to be numbered: the flexible curriculum; primary concern with the facts of "here-and-now" in the early years, and the consequent relegation of "far-away-and-long-ago" to a position of subordinate importance; a liberal proportion of subject matter drawn from the biological and physical sciences; the teaching of "tool subjects" made incidental to the program of subject matter; elimination of the separate studies, the "branches" into which our schools have tried in vain to present subject matter, regardless of the fact that subject matter refuses to stay in these traditional pigeon-holes when presented in the actual experiences of life—all these innovations, though insistently urged by educational leaders, remain today largely matters of doubt and of compromise, even in our progressive schools.

Few teachers have the ability to originate new types of practice. This is the explanation of the very evident fact that "liberalized" education is everywhere

handicapped by pretty general employment of the very methods it is pledged to discard. Theory must be illustrated in practice before the great majority of teachers can form any conception of how to proceed along lines differing from those with which they are already familiar.

It is this situation that leads so generally to ill-considered attempts to formalize and interpret didactically any successful innovation in school practice. It is this situation too that gives to a record like Miss Hamaïde's special significance over and above its intrinsic value as a reconstruction of school experience in accordance with theory. Dr. Claparède, in the delightful and informing discussion he has contributed to the following pages, makes an eloquent plea that teachers will interpret the message of this book creatively, that they will see in their true proportions the principles that are vital to Dr. Decroly's work, and will concern themselves with these, rather than with the letter of the practice described. From the broader educational perspective he is right; and yet, to those aware of the situation in many schools that seek to employ liberalized procedure, there is much of importance in the details of the practice that Miss Hamaïde lays before us.

Of outstanding interest is "the Decroly Program," that amazing outline for the organization of subject matter that combines the naïve appeal of a child's thinking with a philosopher's outlook on the world. I believe no teacher attune to the heart of childhood can be informed as to this program without being deeply influenced by it. Certainly no teacher of elementary school children should so far have forgotten the language of his or her own childhood, as to fail to receive contagion from its spirit, and many will rejoice in its inspiration, and in the scope it affords for creative interpretation. The study of the "fundamental needs" unifies the child's conception of his world, and introduces elements of solidarity and interdependence

which we can but think must be of very great significance for the mental hygiene of the individual, of vital importance, certainly, for orientation in that world citizenship we are increasingly called on to practice in modern times.

But more significant than any subject matter, however well selected and organized is the constant appeal made to the interests and "hungers" of childhood. The ingenious utilization of such deep-seated tendencies as those of manipulation and collecting, the socialization of the class work, the provision of varied manual activities as vehicles of individual expression, the great variety and constant change of the activities engaged in, the employment of games, of the little child's natural impulse to interpret the world first of all in terms of himself, these and similar features, aside from the educational values intrinsic to any of them, must be recognized as skillful bidding for effective responses. Thus there is constant re-enlistment of the pupil emotionally, in the constant application of Dr. Decroly's early slogan, "Organize the environment to afford adequate stimuli for the tendencies favorable to development."

And this suggests another outstanding feature of the Decroly teaching. For side by side with manipulation of the school environment to secure affective responses, we recognize a conscious planning of activities and situations to stimulate a special type of constructive thinking. From the very beginning of the school experience the children engage in activities that amount to nothing less than the assembling, classification, and comparison of data placed on the level of their interests and abilities. The daily experiences are thus made to yield material for generalizations of the child's own formulation—generalizations in which the facts of first-hand observation, the conceptions of fundamental relationships, the recognition of analogies and differences that so definitely characterize the Decroly teaching are brought to their logical fruition.

What is this but "The Grammar of Science" in terms of the elementary school? That wonderful opening chapter of Karl Pearson's classic discussion comes constantly to mind as one turns these pages. "Scientific method," evolved after centuries of trial and error on the part of human kind, is to be found here in words as nearly of one syllable as it would seem possible to devise.

Perhaps the most significant contribution of the Decroly plan, then, is the serious attempt it includes to afford children experience in the elements essential to this type of thinking, with all that it implies for individual attitude and human progress. In one of his memorable "Conferences at Anderlecht" Dr. Decroly speaks of "Organizing the environment, the activities, the influences of imitation in a way to develop the most important habits, notably habits of working joyfully and collectively." If we are ever to secure more general appreciation of scientific thinking and the scientific attitude of mind, it would seem we must accomplish it in some such way as this, in the early years and under joyous and social conditions.

Certain similarities and certain contrasts will be apparent between the Decroly teaching and that teaching by "Projects" that now forms so important a topic of discussion among American teachers. The similarities appear convincing, the contrasts are instructive. The "Belgian project method," as it has been called, is rich in suggestions for those who seek to develop and refine American project teaching. That it stands to gain from better knowledge of certain ideals and practices that have characterized our experience is also true. But the full measure of Dr. Decroly's contribution to educational thinking in his own country cannot be assessed by the English speaking reader unless he or she appreciates how many educational reforms that, in theory at least, are more or less widely accepted by schools in America and England, still call for pioneer work in Belgium as in other continental countries, and

demand a corresponding amount of initiative, effort, courage on the part of the reformer. Dr. Decroly has long been an advocate of co-education in a country where it is practically non-existent. He has been one of the first of Binet's followers in the use of intelligence tests. He is a zealous supporter of the country day-school idea. The extensive use of manual activities, the socialization of the school experience, the enlightened conception of discipline, the physical freedom that characterize the work described by Miss Hamaïde, all represent innovations in Belgian school practice to a degree that we may easily fail to recognize.

And the same is true of the methods Dr. Decroly employs for the acquisition of reading and writing techniques. Miss Hamaïde's illuminating chapter on reading reveals the essential similarity of these "ideo-visual" methods to the "word-sentence" method so widely and successfully used in American practice. And if realization of that fact makes very clear the part that barriers of distance, language, nationality still may play in isolating educational experience, equally clear becomes the part that more adequate provision for intellectual co-operation between the teachers of different nationalities may play, in furthering the acceptance of progressive practices, and in permitting children the world over to benefit accordingly.

JEAN LEE HUNT.

*New York, November*, 1924.

# CONTENTS


PAGE

PREFACE, PROF. ED. CLAPARÈDE ..... xxi

CHAPTER

I. INTRODUCTION—HISTORY OF THE EXPERIMENT ..... 1

II. EDUCATIONAL POINT OF VIEW AND METHODOLOGY ..... 13

III. OBSERVATION ..... 29

IV. ASSOCIATION ..... 41

V. EXPRESSION ..... 49

VI. READING AND WRITING ..... 57

VII. THE SOCIAL VIEWPOINT ..... 95

VIII. A DEMONSTRATION ..... 107

IX. STUDIES OF INDIVIDUAL CHILDREN ..... 133

AUGUSTA ..... 133

HÉLÈNE ..... 146

YVONNE ..... 173

X. TYPE PROGRAMS ..... 181

XI. CONCLUSION ..... 233

SPECIMENS OF CHILDREN'S WORK ..... 241-72

APPENDICES. A. Teacher's Judgment Graphs, 275; B. Questionnaire on Affectivity, 283; C. Bibliography, 306.

INDEX ..... 313

# LIST OF ILLUSTRATIONS

COMPARING THE TADPOLE AND THE GOLDFISH ..... *Frontispiece*

FACING PAGE

FIGURE

1. IN THE FIRST YEAR AT ELEMENTARY SCHOOL C. A FREE PERIOD ..... 18
2. MEASURING THE GROWTH OF THE PLANT AND THE AMOUNT OF WATER IT ABSORBS..... 34
3. SETTING UP THE MODEL CLASSROOM. CHILDREN OF THE THIRD-YEAR CLASS..... 68
4. CARING FOR THE ANIMAL PETS AFFORDS MANY INCIDENTAL OBSERVATIONS..... 98
5. DECORATION OF THE CLASSROOM. END OF THE FOURTH YEAR..... 128
6. GATHERING AQUATIC SPECIMENS..... 146
7. REVIEW CHART PLANNED AND EXECUTED BY CHILDREN OF A THIRD-GRADE DECROLY CLASS ..... 204

PAGE

8. BRUSSELS AND ITS ENVIRONS. RELIEF MAP IN CLAY MADE BY THIRD-YEAR CHILDREN 241
9. BRICK HOUSE, A GROUP PROJECT BY FIRST-YEAR CHILDREN..... 242
10. MATCH-BOX VILLAGE, A GROUP PROJECT EXECUTED BY TWENTY-THREE FIRST-YEAR CHILDREN ..... 243
11. "THE SILK WORM." REVIEW CHART MADE BY A GROUP OF TWENTY CHILDREN (FIRST YEAR) ..... 244
12. "LINEN." REVIEW CHART MADE BY A GROUP OF SEVEN CHILDREN (FOURTH YEAR).... 245

PAGE

13. "Germination of a Seed." Chart by a Group of Twenty-Three Children (Fourth Year) ..... 246
14. Model of the Schoolroom. Made by a Class of Third-Year Children on a Scale of 1/8 ..... 247
15. "A Walk in the Park." Page from Observation Note-Book, First Year ("X," 6 Years) ..... 248
16. "Making the Compote." Observation Note-Book, Second Year ("X," 7 Years) 249
17. "The Sun and Its Work." Observation Note-Book, Third Year ("X," 8 Years) 250
18. "Food Supply of the Esquimaux." Association Note-Book, Third Year ("X," 8 Years) ..... 251
19. "Distribution of Plant Life." Association Note-Book, Fourth Year ("X," 9 Years) ..... 252
20. Measurements of a Sprouting Seed and of a Garden. Arithmetic Note-Book, Fourth Year (Child of 9½ Years) ..... 253
21. "The Work of Our Muscles." Exercise at School and Measurements of Strength. Observation Note-Book, Third Year (Child of 8 Years) ..... 254
22. "The Dissemination of Seeds." Observation Note-Book, Fourth Year (Child of 9½ Years) ..... 255
23. "Cooking the Beans." Augusta's Observation Note-Book, First Year (6 Years) ..... 256
24. "Eggs of the Frog and of the Silkworm." Augusta's Observation Note-Book, Second Year (7 Years) ..... 257

PAGE

25. "Man's Work for the Plant World." Augusta's Observation Note-Book, Third Year (8 Years) ..... 258
26. "The Work Mamas Do in the Congo." Augusta's Association Note-Book, Third Year (8 Years) ..... 259
27. "Fur-Bearing Animals." Augusta's Observation Note-Book, Fourth Year (9 Years) ..... 260
28. "Fur-Bearing Animals of Europe." Augusta's Association Note-Book, Fourth Year (9 Years) ..... 261
29. Free Work in Drawing. "Red Riding Hood." Augusta (7 Years 7 Months) 262
30. Free Work in Drawing, Augusta (8 Years 4 Months) ..... 263
31. Drawing from the Object, Augusta (9 Years 6 Months) ..... 264
32. Imaginary Landscape. "The Forest of Soignes." Augusta (9 Years 6 Months) 265
33. "St. Nicholas." Illustration for a Composition, Hélène (10 Years) ..... 266
34. "To My Weeping Willow." Illustration for a Composition, Hélène (11 Years) 267
35. Girl Drawn from Life. Hélène ..... 268
36. Cover Design. Hélène (12 Years) ..... 269
37. "For Grandfather's Birthday." Illustration for a Playlet, Hélène (12 Years) ..... 270
38. "Lapinot's Dream." Illustration for a Story, Hélène (12 Years) ..... 271
39. "Jack Rabbit." Illustration for a Poem, Hélène (12 Years) ..... 272

# PREFACE

WHEREFORE a preface? What possible end is to be served by placing one here? The name of Dr. Decroly on the cover of a book, whether as author, or, as in this case, sponsor for the work it describes, constitutes of itself sufficient introduction. More than that, it is a positive guarantee that all our teachers, all our psychologists as well, are going post-haste to their respective booksellers to secure this treatise, without troubling in the least to know whether it is, or is not "recommended" by a few additional pages from the pen of a somebody else, more or less unknown.

Under such circumstances a preface is something of an absurdity, one to which I should never have lent myself—indeed, I should have declined the kind suggestion of Mlle. Hamaïde, had it not been for one important consideration. This writing of a preface affords me an opportunity to express to my old friend Decroly, something of the appreciation so many of us feel for his work. I can here speak to him on the part of all those workers who seek to end that formidable "bloc" of conventionality, now obstructing educational progress. I can say to him how fortunate we know ourselves to be, in having on our side so valiant a fighter, armed with so rich an experience, and able to place both his scholarly

thinking and his persuasive spirit at the service of truth.

Dr. Decroly possesses an indisputable superiority over the majority of his companions in arms—our contemporary psycho-pedagogues, in that he is a psycho-pedagogue in the real meaning of the term. Many there be who are psychologists merely and, whether of the philosophic or laboratory variety, have derived their theories of education from deduction only, without ever practicing the fine art of the teacher themselves. And on the other hand, we have the pedagogues, heads of our schools, administrators of our school systems, who have never qualified in psychology, and approach that science as mere amateurs.

Decroly has broken with traditional school practice, as well as with the traditional practice of the psychologists. While playing his rôle of physician in the two schools he has organized, he has been able to study his pupils closely, to make day to day observations on the normal, as well as on the abnormal children. Everyone is acquainted with the published results of his research studies—on the measurement of intelligence, on ideas of time and ideas of number in childhood, on the psychology of reading, of drawing, and in other fields. It is this triple outlook of educator, psychologist, and physician that gives to all his work so special a value. He has considered every problem on which he speaks, in all its aspects. And the conclusions he reaches have the authority, on the one hand, of psycholog-

ical theory, derived from an intimate knowledge of childhood, and on the other that of tried educational practice. Even so his experience hardly lends itself to such a distinction, since it has been in educating the child that he has acquired his knowledge of child nature, and each one of the numerous and ingenious pedagogical devices that he has originated has been suggested to him by some fact of psychology observed in his pupils.

To classify Dr. Decroly among the great contemporary educators, we may say that his characteristic work has been this: thanks to that triple capacity in which he works, and which I have just described, he has been able to synthesize the various viewpoints that, in the last twenty-five years, have tended to recognize certain things as fundamental to the educational process—activity, experience at first hand, interest based on the special needs of successive age periods—in a word, recognition of the child himself.

Like Binet, Decroly is an accomplished psychologist. He was among the very first to become interested in the intelligence tests devised by the late French savant; he has verified them, developed them, invented others.—Like Mme. Montessori he has turned from the teaching of exceptional children to reform the teaching of the normal child. Like her, like Ligthart at La Haye, by reducing theory to successful practice, he has demonstrated the possibility of an educational process, and of teaching methods, based on the principle of freedom.—With

Dewey he demands that teaching shall be appropriate to the interests of the child, and he believes it advantageous to supply subject matter drawn in the first instance from the most primitive needs, those that disclose humanity in contact with its environing conditions—the need to feed oneself, to clothe oneself, the need, moreover to work in harmony with one's fellows.—And, like Kerschensteiner, he believes that the school should be a *laboratorium* rather than an *auditorium,* and demands that manual activities be made to contribute to the acquisition of learning.

In agreement with all of these—and with our own convictions as well—he would bring the school into closer touch with life, and have its pupils learn to do by doing.

But if we would have him do, we must give the child a desire to do. And the desire for doing depends, in part, on individual disposition. It depends as well, on a characteristic need of childhood, the need to play. It is by presenting in the guise of play those activities in which we wish him to engage, that we assure to the child in fullest measure, the benefits to be derived from them. Indeed, it is play, and only play, is it not, that enables him to relate fully to his life certain experiences we adults desire of him? Decroly has long since understood this fact, and it is through one type of play, through games, most ably conceived (perfected, and published by our colleague, Mlle. Descoeudres) that he has succeeded in arousing, in forcing, one might almost say,

the interest of the defective child, even in cases that, at the beginning, seemed incapable of any effort of attention. And these same games he has found of value in stimulating mental activity in the young child of normal intelligence. Moreover, by elaborating them, making them increasingly difficult, while maintaining the same fundamental principles, the older child is brought to observe for himself, to make comparisons, to think, reflect, invent.

Play! It is a bridge, by which the child may pass from his school world to life's realities!

Dr. Decroly's methods have met with striking success in the fifteen years already numbered to the credit of his school for normal children at Brussels. Success not always recognized, indeed, save by the children. In their eyes it has been complete—enthusiasm, work, good-fellowship, everything of which one dreams, at its best. Not so with certain parents, people steeped in prejudices, who dislike any departure from the beaten track. And not so with the public in general, only too prone to condemn new methods, without troubling ever to see them in operation. "A child from the Decroly school never knows how to read, write, or figure!" We have heard the same song here in Geneva, apropos of our "Maison des Petits." But truth triumphs in the end. In spite of criticisms, damaging however absurd, those methods of "learning through living" that we have all been advocating, and whose verification through a long experience has been Decroly's great achievement, have at last

received the highest recognition to which school methods can aspire—that is to say, official recognition.

For a year past the Decroly plan has been in use in a dozen classes of the school system of Brussels and its suburbs. And it is to Mlle. Hamaïde that this development is due. By introducing the plan five years ago in one class of a city elementary school, she made evident beyond dispute, that it is not, as some have claimed, a special régime, applicable only to the children of the rich, but can be used with equal success in any school.

She is to be accorded unstinted praise for the initiative she has displayed. She has made a demonstration of very great practical importance, for it affords us a decisive argument against those who see in the new pedagogy, nothing more than a system de luxe, an aristocratic institution, unable to function save under the most favorable conditions.

The pages which follow contain a detailed exposition of the Decroly school plan. Is it necessary to say that we will find here, perforce, a splendid example of "learning through living" rather than a model, to be slavishly copied in its every particular, *ne varietur*. It is the spirit far more than the letter that is the point in question. And if I say this, it is not because I have the slightest criticism to offer of the plan here laid before us. It is a plan that has been developed alike out of the achievements of psychological inquiry, and those of practical experience. It has been worked out by a most skilled

investigator of the child mind. And its value has been demonstrated by an experiment that is crowned today with indisputable success.

But I must not forget that education is an art, and that in all art, granted there is a method—and in pedagogy the importance of method is but too little appreciated—there is also the artist to be considered, as well. If Dr. Decroly's program has yielded wonderful results, it has also had the advantage of being applied under the direction of the man who developed it, in accordance with his own ideals. Now it is quite possible that the same program might make no appeal to some other educator, even though able, and imbued with the same basic principles—someone viewing the child's contacts with life from a different perspective, someone endowed with different gifts, who would conceive of other means to arouse the desire for knowledge, who would find other pretexts for motivating the activities of his pupils.

In making such a reservation, I believe I am but concurring in Dr. Decroly's own opinion. He knows well—and he would know it better yet, were it not for his own too modest estimate of himself—that a school plan is nothing without a personality behind it, one that can make of it a living process, and bring its possibilities to fruition. For the same reason, too, it will not do to judge the success of his program solely from the description of it to be found here. That humming, working hive—the school in the rue de l'Ermitage—exhibits a stir, a life, but

too imperfectly reflected in these pages, designed as they are to analyze a program, rather than to paint a picture of the zeal and enthusiasm felt by those who follow it.

The art of teaching, like all other art, implies a genius—that is to say, an unending creativeness. And genius is with difficulty confined to limits fixed, even by genius in a predecessor. Let each one of us seek inspiration, then, in the ideals fundamental to this plan of Dr. Decroly's, but let us still be free—at least within the limits set by laws of mental growth and child psychology,—free to realize those ideals at their best, through individual interpretation.

ED. CLAPARÈDE.

Geneva.
*January* 15, 1922.

# INTRODUCTION—HISTORY OF THE EXPERIMENT

*It is evident to those who understand the child of the Elementary School that the only processes of acquisition, the only processes of assimilation that are in harmony with his ability to think, are those that he experiences in close contact with the real, the actual.*

*Let the child prepare for life by living.*

*Organize the environment to afford adequate stimuli for the tendencies favorable to development.*

—OVIDE DECROLY.

# The Decroly Class

## CHAPTER I

### INTRODUCTION—HISTORY OF THE EXPERIMENT

Since 1907 there has been a little school in the rue de l'Ermitage in Brussels. It stands a few steps from those superb chestnut trees that line the Avenue Louise in double row, and very near the Bois.

Its pupils come to it as little children. As big children they leave it. As "grown-ups" they revisit it from time to time, to recall old days and happy memories.

It is Dr. Decroly's school. We may well pause in our narrative at the mention of that name, yet in deference to the reserve, the simplicity of a great personality, we can attempt here only the briefest of biographical outlines. Word portraiture is at its best inadequate, and, moreover, every page of the following record reflects in some degree that individuality in whom learning, understanding, kindliness, are the rivals of energy, enthusiasm, and devotion to an ideal.

Ovide Decroly was born at Renaix, the twenty-third day of July, 1871. After taking his M.D. with special honors at the University of Ghent, he went to Berlin for study with Langerhaus, Mendel, and

Joly. Then he worked at Paris for a year, under Raymond and Joffroy. Settling at Brussels, he became assistant to Dr. Glorieux at the Polytechnic hospital there.

In 1901 he founded his school for defective and exceptional children. Here he devised a pedagogy based on psychological findings, and appropriate to the type of cases under his care.

In 1907 he established a school for normal children on principles conceived as a result of his experience in teaching the exceptional child. This is the school in the rue de l'Ermitage, "the school for learning through living."

In 1912, under government auspices, he conducted a course for teachers of exceptional children and became director of the section on the psychology of vocational guidance. In 1913 he was made professor in the higher normal school of Brussels, the École Buls-Temples.

In 1914, in company with a group of educators and philanthropists, he started the work for the care of war orphans, the "Foyer des Orphelins" of which he was made president.

In 1920, the University of Brussels opened its gates to him, and made him head of its department of child psychology. In 1921 he became head of the department of school hygiene in the University Medical School.

The greater part of his thinking, versatile as it is prolific, has never been committed to writing. Indeed, he would prefer never to write. At the same

time studies and articles from his pen do appear, occasionally, and among them a certain number deal with the science of pedagogy to which he has made so important a contribution, both as scholar and as man of action.[1]

Dr. Decroly's first experience in the field of education dates from 1901, and was gained, as we have seen, in his school for the care of exceptional children. Like Mme. Montessori, he derived his first inspiration from contact with those unfortunates the common school rejects, or cannot educate.

It was his observation of such children, the necessity he was under to individualize, to apply himself at one and the same time to the varied problems they presented—physical, mental, moral, professional, that made him aware of the true scope of educational problems, and ready to accord to each its due importance.

After a time his clarifying formulas took shape: *"Let the child prepare for life by living,"* and *"Organize the environment to afford adequate stimuli for the tendencies favorable to development."*

Dr. Decroly's ideas on discipline, on co-education, on self-help and self-government, on the school curriculum and teaching methods, on individual and group activities for children, on cultivation of the impulse to experiment and to create—he had arrived at all of them after four or five years of this intensive experience, and he was therefore quite ready to act when the suggestion was made to him by various

[1] *See* Bibliography, Appendix C.

citizens of Brussels that he found a school for normal children.

The location chosen, in the rue de l'Ermitage, while on the outskirts of Brussels, is nevertheless sufficiently central to permit the attendance of very little children.

Mlle. Degand and Mlle. Monchamp, collaborators with Dr. Decroly from the very first of his work, have been leading spirits in the school's development. They have brought to its problems the devotion of enthusiasts fired by a great ideal, and have shown untiring effort, intelligence, and understanding. Indeed, it has been very largely due to them that the experiment has been carried through to success.

They have been the organizers, too, of the "New School League" recently started among the teachers and others interested in the École de l'Ermitage. This society can be best described by a quotation from the closing lines of its by-laws: "The New School League aims to disseminate modern ideas on education and to aid in their application. Its object is to bring together all those who are in sympathy with the progressive type of education, and who seek to discard those leading strings of dictation and dependence, that inhibit the child instead of stimulating him."

"Learning through living" the school prospered. Its results surpassed all that had been hoped. Converts to its ideas were increasing. A sister school was started. Then came the war, the hour of trial!

Many families left Belgium, the children with them. The sister school was forced to close its doors. For a time it seemed the work in the rue de l'Ermitage must end also, that the struggle for existence, so long continued, so fraught with significance, was to be lost. But no, the school managed to survive, and the last throes of that horrible absurdity found it still there, ready with all confidence to carry on.

In 1917 a committee of parents, two representatives from each class, was organized with Dr. Decroly as chairman. It met once a month to discuss questions concerning the children, the work of the school, and the increasingly difficult problems of ways and means.

The year 1920 found the school depending, as always, on its own resources alone. No outside aid of any kind had yet been given it. But it was no longer unknown. The Belgian government finally became interested, and at last, in accordance with the recommendations of investigators, granted it a subsidy.

During five years spent at the École de l'Ermitage, I followed the development of its pupils at first hand and found that the results obtained there exceeded Dr. Decroly's own expectations. The testimony of parents as well as teachers confirmed me in this opinion and thus it was with the greatest enthusiasm and as a thorough convert to the plan, that I entered Elementary School C. in the rue Gravelines, Brussels, five years ago.

To be sure I did not take the step without some

misgivings. "The Decroly plan can never succeed except with children of the well-to-do." On all sides we had heard this objection raised. Experience has proved the contrary, but in those first days I often asked myself in great anxiety, whether it really would be possible to apply Dr. Decroly's methods in a government school, where the standards of a fixed program must be met. However, these ideals had now become my own, and for the children's sake, I was ready to do combat if necessary in behalf of them.

But whatever my apprehensions, they were quite unjustified. The Principal, Mlle. Carter, who had been my own teacher for years at the Gatti School in Gamond, placed me in charge of a first year preparatory class.[1] I shall always feel the deepest gratitude to her for the confidence she placed in me. From the beginning, she accorded me great freedom in my work, and her complete understanding of the new methods was in itself a constant encouragement.

One day M. Devogel, Superintendent of the Brussels schools, paid us a visit. He brought with him M. Nyns, the school inspector, who had been interested in Dr. Decroly's work for years, and had brought my class to M. Devogel's attention. Struck by the activities engaged in by my small pupils, M. Devogel decided to try a similar experiment in a poorer neighborhood. That his interest had been

[1]The Classes Preparatoire correspond to the first four grades or forms of the American School.—Ed.

really enlisted was evident, from the fact that he chose his own daughter for the experiment. She was placed in charge of a first-year class in the trade school of the rue des Capucins, but did not long continue the work, because of the demands made on her by courses she was taking at the University. Her place was taken by the enthusiastic Mlle. Doffagne, who is now using the plan in a fourth-year preparatory class with most interesting results.

Later on I was invited to give two lectures at the Société belge de Pédotechnie.[1] As a result many visitors, most of whom were teachers, came to see my class at Elementary School C. and were astonished at the work they found my children doing.

Still later, at a meeting of school Principals, Superintendent Devogel proposed that a more extended application of the plan be made in the first-year preparatory classes. Many responded favorably to the suggestion, and it was decided to begin the experiment at the opening of the fall term, September, 1920.

Today eleven classes[2] of our city schools have

[1] "An application of the Decroly Plan in a City School at Brussels" and "The Ideo-visual Method of Instruction in Reading."

[2] Schools in which these first experiments were made are:
No. 17, rue des Six-Jetons, two classes.
No. 10, rue de Rollebeek, two classes.
No. 21, rue du Midi, one class.
No. 16, rue Blaes, one class.
No. 20, rue du Canal, one class.
No. 14, Nouveau Marché aux Grains, one class.
Elementary School C. (girls), one class.
Trade School, rue des Capucins, one class.
No. 9, rue des Eburons, one class.
In 1924 the number of Decroly classes conducted in the Brussels school system had increased to forty-six.—Ed.

already tried the plan. In no instance has the experiment been imposed on a teacher. In every case the undertaking has been voluntary. But a somewhat delicate situation arose at the beginning, from the fact that the teachers volunteering had had no previous training in teaching of this kind. For the most part, indeed, they had but the vaguest ideas as to how they should proceed. For this reason I placed myself at the disposal of the city to get the work started, to advise and assist those who wished to undertake it.

I went from school to school and, at the beginning, encountered a certain amount of skepticism. Very soon, however, the teachers grew enthusiastic. The work done in some of the schools was really amazing. One needs to visit the classes as I did, and talk with the different teachers personally, if one would appreciate the value they place on this kind of teaching. One and all declared that never again would they go back to the old way.

The reason for their enthusiasm lies in this: aside from the interest it holds for the child, the Decroly plan interests the teacher as well. He soon realizes it has an educative and developing value for him. He feels himself growing to meet the higher level demanded of his pupils.

And now, to bring this introduction to a close, let me recall the words of Dr. Ferrière:

"Reader, if you encounter any more of those 'boxes,' schools of the old type, go in and shake the master in his chair! Wake him up! Say to him,

these are new times, that he is perpetuating an anachronism, that he must either pack up, or mend his ways. You may, perhaps, do him a service thereby. Certain it is that you will do a service to thousands of the youngsters of today who, eager to bestir themselves, to share in life's realities, would cry out were they versed in Latin: 'primum, vivere; deinde philosophari'."[1]

[1]Ferrière, Ad., *Transformons l'École*, Bâle, Azed, 1920.

# EDUCATIONAL POINT OF VIEW AND METHODOLOGY

*The essential defect of the Elementary school curriculum to my thinking lies in this, it has been the work of men learned in their specialties, but too little concerned with child psychology. . . . And in every attempt that has been made with a view to bettering it, the result has been the addition of new subject matter conceived in the same spirit. Thus nothing has been gained, rather the curriculum has become correspondingly overloaded and more indigestible.*

—Ovide Decroly, *Conferences at Anderlecht.*

*Ever since we have taken the trouble to study the child himself in order to uncover the true basis of a natural pedagogy, we have known that only bio-psychological interest can provoke and hold his attention, can direct and control his mental assimilation. We have known, too, that the native interests of children in all countries lie outside of the school as it has been conceived by the exponents of a logical pedagogy. We have known that the continuous action of a well-chosen environment can of itself kindle the activities appropriate to development and permit the child a true and entire realization of his personality.*

*It is necessary then, that the study of nature conceived in the active sense, as a matter of practical experiences and effective utilization of the surroundings, should be the center of a program of subject matter based on pedology. As a result the well-considered teaching of natural sciences must be accorded a more important place in our programs, a place beside the mother tongue as the core of the curriculum.*

—O. Decroly and R. Buyse, *Les applications Américaines de la psychologie a l'organization humaine et a l'éducation.*

# CHAPTER II

## EDUCATIONAL POINT OF VIEW AND METHODOLOGY

As we have seen, Dr. Decroly has developed his school plan out of an experience extending over thirteen years, an experience continued in the face of difficulties of every kind, from those met in recruiting pupils, to those arising from frequent changes in the teaching personnel, and from financial uncertainties that were greatly increased, as the reader will appreciate, by the War.

He has himself given us a brief description of its characteristic features in the following program of fifteen "points" presented at a conference held during the Congress for the New Education at Calais, in 1921.

(1) The school that would ensure a liberal education up to the fifteenth year of age should be located among natural surroundings. That is to say, it should be placed in an environment affording the children daily experiences with the phenomena of nature, and with manifestations of the life led by living creatures in general, by man in particular, in

their efforts to make adaptations to the conditions of existence in which they find themselves.[1]

(2) The number of pupils preferably should not be large. If possible every age from 4 to 15 should be represented, and both sexes.

In our city communities where the school enrolls a large number of children, co-education may be continued up to the tenth or twelfth year, according to the character of the school district, and the class of children to be considered[2].

(3) The school plant should be equipped and furnished in a manner quite different from that characterizing the conventional classroom of the "auditorium" type. The ideal to be followed is rather that of the small scale studio or laboratory, with tables, running water, apparatus for artificial heat and light (gas and electricity), and counters and shelves for exhibits.

(4) The staff must be active, intelligent, and possessed of creative and inventive ability. They should be trained in methods of observing plant and animal life, and in making observations of children as well. They must be fond of children, and interested to acquire a knowledge of psychology and the allied sciences. They must be able to express them-

[1]It will be evident that, to fully meet this condition, the school plant should be located outside the city proper. Dr. Decroly recognizes the difficulties in the way of securing so fundamental a change, but argues that these do not offer sufficient reason for abandoning all attempts to realize this important reform. (*See* his paper printed in the *Revista di psicologia de Ferrari*, Jan., 1921.)

[2]Co-education is an innovation in Belgium, the École de l'Ermitage being a pioneer in this as in other features.

selves with facility, and to keep order and discipline without special effort.

(5) As far as possible the class groups should be made up of children of approximately the same mental level and maturity. Homogeneity of this kind is of increasing importance the greater the number of children in a group. Classes should not exceed 20, or at most 25 pupils.

(6) If the school finds a sufficient number of exceptional children among its pupils, that is to say from 10 to 15 individuals, a special class should be organized for them, and placed in charge of a teacher thoroughly trained in methods of assisting the retarded, and developing the subnormal.

(7) The morning hours are to be given preference for work in the techniques of spoken and written language (lessons in reading, writing, spelling) and of number. At least three or four times a week the first period of the day should be devoted to this kind of work. Lessons in these techniques for the most part take the form of games in which emulation and the satisfaction of success furnish the chief incentives to effort.

(8) The morning hours following work in the techniques of language and number, are devoted to various activities: the lessons in observation, comparison, and association, described later, drawing and other kinds of manual work, singing, active games, etc.

All these activities are selected in relation to a special organization of subject matter, the school's

*Program of Associated Ideas.* In their selection the teacher must be guided by the interests of the children, by such opportunities as the school environment may afford, and by the necessity of according due emphasis to the more important mental processes.

(9) Except on half-holidays, the afternoons are devoted to manual work and to foreign languages.

(10) On certain mornings excursions and visits are arranged. At such times the children gather specimens (aquatic animals, insects, etc.), they visit factories, works of art, museums, the railway stations, craftsmen's houses, and other places of interest.

(11) The parents are informed in regard to the school's work and aims, and by their understanding of the methods used contribute much to their success. A parents' committee participates in the school administration.

(12) When occasions for discipline arise, the school seeks to give the child concerned an understanding of the questions at issue, and of their significance, and to bring him by this means to the exercise of self-control and self-discipline.

The small number of children in each class makes it possible to allow the same informality in the schoolroom that one ordinarily finds in a studio or workshop. Except when some special activity calling for quiet or silence is in progress, the children move about freely, as their requirements may

dictate, and talk over the work they are doing with their fellows or with the teacher.

(13) In order to develop initiative, self-confidence, and group spirit, class conferences are held from time to time. The topics discussed are chosen by the pupils themselves, and approved by the teacher. They are preferably related to the subject matter of the class exercises in observation and association.

(14) The interest of the children is stimulated by the constant variety of the activities and forms of expression in which they are called to participate, sometimes as a group, sometimes as individuals. A list of these would include the arrangement of their classrooms, their collections, materials, pictures, books, and reference readings; the making of charts, of pieces of apparatus, of boxes and envelopes for classifying purposes; the repairing of articles in use, when broken or worn; care of the aquaria and terraria; the writing of original themes on subjects chosen at will and approved by the teacher; organization of the duties and responsibilities relating to the group life of the class, and to the larger life of the school community.

(15) The school employs a special organization of subject matter, the *Program of Associated Ideas;* this, with the several centers, into which it is divided, and the methods of instruction employed in connection with it, calls for consideration in detail.

In one of his published discussions[1] Dr. Decroly states his conviction that we cannot expect to

[1]Decroly, O., in *Revista di psicologia de Ferrari,* Jan., 1921.

modify the life of a people in accordance with the measures recommended by economic and political reformers today, until we have first educated a generation to the understanding of their life problems.

The educational reforms entailed by such an undertaking are many. Among them are the proper location and construction of our school plants. Of even greater importance, indeed, the most urgent of the changes demanded, are those that concern the curriculum and teaching methods.

Let us ask ourselves just what are the faults that progressive educators find with the school curriculum in use today. They can be briefly summarized as follows:

1. No correlation, or too little correlation in the different activities demanded of the child.
2. Subject matter too little in keeping with the fundamental interests of childhood, and with the evolution of these interests.
3. Division into "branches of instruction" without regard for the thinking processes natural to childhood.
4. In the majority of such "branches" an amount of subject matter exceeding the capacity of the average child to assimilate or memorize.
5. Too much emphasis on those branches that can be taught verbally.
6. Too little opportunity for self-initiated, individual activity on the child's part.

The school achieves the general purposes of edu-

Fig. 1.—In the first year at Elementary School C. A free period.

cation in so far as it prepares the child for the realities of life, of life as he finds it in the society of his fellows. His preparation then will be accomplished to the best advantage by means of a practical initiation in living—that is, by a wide range of experiences, more especially of experiences in social living.

### The Program of Associated Ideas

So far as it concerns the subject matter of the curriculum this initiation must afford the child:

(a) Knowledge of himself; the conception of himself as a being, of his needs, his desires, his purposes, his ideals.

(b) Knowledge of his environment; of the conditions, natural and man-made, under which he lives, on which he is dependent, and within which he must work, if he is to realize his needs, desires, purposes, ideals.

In his choice of subject matter therefore, Dr. Decroly's guiding principles have been these. Since we must prepare the child for life, we must give him an understanding of life, so far as that is possible; and since life includes two fundamental realities, the living being and the environment in which he lives, our course of tudy must concern itself with:

1. Living creatures in general—man in particular.
2. The surrounding universe, inclusive of society.

And how are we to give the child an understanding

of those great laws that have shaped the universe and humanity?

We may approach them through the consideration of two kinds of activity:

1. Those that concern the individual, the study of individual functions.
2. Those that concern the species, the study of social functions.

Man, for example, must feed himself, he must protect himself from heat and cold, defend himself from his enemies, he must learn to maintain himself. These are his functions as an individual. He must maintain his family and fulfill his duty to society. These are his functions as a member of the species.

And to consider them is in reality to consider the conservation of the individual, and the conservation of the species.

To place this kind of study on the level of the child's thinking, and within the range of facts that he can observe for himself, Dr. Decroly makes the following classification of the primary needs that from all time have exerted the widest influence on society:

The need to feed oneself.

The need to protect oneself from the elements.

The need to defend oneself against dangers and enemies of various kinds.

The need of activity; of work with one's fellows, of recreation, of self-development.[1]

[1] NOTE.—The need of air and of cleanliness may be classified under the first heading; under the last, the need of light and of repose.

And if we envisage the conception of his world that a child may gain from a study of the satisfaction of these needs, we will find that every element of the environment has been considered. Such a study will involve the factors of the human family, the school, the social surroundings, the animate surroundings, animal and vegetable, and the inanimate surroundings even to the sun and stars.

Moreover, we shall find that it includes:

1. The action, favorable or unfavorable, of the environment on the individual.
2. The re-action of the individual on his environment—the use made of it in relation to man's needs.

But how conduct such a study?

We must have recourse in the first place, to direct observation of the facts within the child's immediate surroundings, then to examination of the facts less accessible to him in time and space. We must center our study about the child himself. He must take cognizance of his own personality, his individuality, the structure of his own organism, physical and mental. He must examine his own needs, and in connection with them, take into account what Nature and his fellows do for him, the debt he owes to them, and the obligations he is under to discharge that debt.

Having studied his needs, he studies their satisfaction, and his doing so constitutes a study of his environment. The satisfaction of a need should be considered under these different aspects:

The general advantage afforded to mankind—means by which such advantage may be realized.

The difficulties to be encountered—the means to overcome them.

The practical conclusions as to individual behavior—what is necessary for the child's own good, for the good of others.

### Types of Activity

In a study of this kind, four different methods of investigation are open to the child:

1. He may approach the facts directly by the use of sense experiences and first-hand observation.
2. Indirectly, through his memory of facts previously observed.
3. Indirectly, by the examination of documents relative to current facts and phenomena inaccessible to him.
4. Indirectly again, by the examination of documents relative to facts and phenomena of the past.

But these will be recognized as affording two general types of experience:

*Observation*—Personal and direct experience with the facts.

*Association*—Indirect acquisition of facts or the recall of facts previously observed.

To these two types of experience that have as their object the formation of judgments, or the com-

parison of judgments already formed with others derived from verbal or written sources, must be added a third type known as Expression.

*To perceive—to think—to act, and to express*—we must not lose sight of that sequence and of the relationships indicated by it. The formation of any general synthesis or conclusion is accomplished by those successive steps—that is to say, by:

1. *Sensory experience* under the stimulus of interest, leading to
2. *Elaboration* by means of general ideas developed through the associational processes, and finally to
3. Verification and interpretation through some form of *Expression,* either concrete or abstract.

Recognizing this, Dr. Decroly classifies the activities a school must provide into the following groups:

*Observation.*

*Association:* in time, in space.

*Concrete expression:* as modeling, drawing, cutting out, making of articles.

*Abstract expression:* as reading, oral language, writing, spelling, free work in composition.

Opportunity for all four of these types of experience may be provided, it is true, under the conditions prevailing in the conventional school. But ordinarily the place assigned to each in the school program has been determined from a different point of view and without regard for the kind of co-ordination demanded by the child's thinking processes. Thus the usual "nature and object lessons" may be

considered as affording some experience in observation. Association in time and space will correspond to history and geography. Expression may be said to include all work done in the mother tongue—spelling incidentally—all exercises depending on verbal memorizations, and, in addition, all manual activities.

Dr. Decroly classifies work in number under the head of *Observation.* As for the techniques of reading and spelling, he does not recognize them as separate branches to which the chief importance must be accorded during the first years of school. Thanks to his employment of the "ideo-visual" methods to be described in another chapter,[1] reading and spelling can be taught as part of the general experience provided by each of the "centers of interest" about which he organizes his program of subject matter, the *Program of Associated Ideas.*

## Centers of Interest

Until recently the subject matter considered during any one year has been organized about several pivotal ideas or "centers of interest," the choice of which has been largely dictated by the season of the year. For example, the topic "fruits" cited in connection with the work of my class at Elementary School C. (*See* pp. 74, 124) provides a center of interest especially applicable to the early fall season immediately after the opening of school.

[1] *See* Chapter VI.

This organization by "multiple centers" is still employed for the first and second grade classes. In 1921, however, the year following our fourth grade work at Elementary School C, after some preliminary experiments at the school in the rue de l'Ermitage, Dr. Decroly began organizing the program of subject matter from the third grade upward by "single centers," using each year one of the fundamental needs as the center of interest for the entire year—that is to say:

1. Food.
2. Protection from the elements—shelter and clothing.
3. Defense against enemies and dangers.
4. Work—the need for activity and for solidarity.

Each center of interest—whether one of the multiple centers, the consideration of which may occupy a month, possibly two, or one to which an entire year is devoted—is considered in its relation to:

I. The child and his needs.
II. The child and his environment—1) the family, 2) the school, 3) society, 4) the animal world, 5) the vegetable world, 6) the mineral world, 7) the heavens.[1]

The work done in connection with each center of interest goes forward by means of the three types of activity adopted by Dr. Decroly in place of the conventional "branches of instruction": *Observation, Association,* and *Expression.*

[1] *See* Fig. 7, Chart made by third-grade children recapitulating a year's program; also type programs given in Chapter X.

# OBSERVATION

*What makes observations in schools often intellectually ineffective is (more than anything else) that they are carried on independently of a sense of a problem that they serve to define or help to solve. . . . Almost everywhere may be found at some time recourse to observations as if they were of complete and final value in themselves. . . . Scientific men never make the accumulation of observations an end in itself, but always a means to a general intellectual conclusion. . . . Until the force of this principle is adequately recognized in education, observation will be largely a matter of uninteresting dead work or of acquiring forms of technical skill that are not available as intellectual resources.*

—JOHN DEWEY, *How We Think.*

## CHAPTER III

### Observation

The lessons in observation are planned with the following ends in view:

Habituating the child to taking note of the phenomena about him, by requiring him to seek the causes of facts he observes, and to ascertain their consequences.

Presenting to him the complex ideas of life outlined in the preceding chapter, but in as concrete a form as possible.

Acquainting him with typical forms of life, that he may be led gradually to a realization of the facts of evolution in relation to plants, to animals, and finally in relation to himself.

The resulting exercises are of two distinct types:

I. *Incidental observations,* drawn from a variety of sources and events that are brought to attention during the school year. These consist chiefly in:

a) Noting each morning any events that may have occurred in the classroom since the day before, as the growth of a plant, the birth or death of an animal, the sprouting of seeds, development of buds.

b) Noting the changes that result from meteorological conditions, as time of day, seasonal changes, rain, wind, tempests, temperature.

c) Classifying objects collected by the children—brought from home or gathered on walks and excursions.

d) Observation of the life and habits of animals raised at school, as tadpoles, silkworms, caterpillars, mealworms, rabbits, guinea pigs, mice, chickens, finches.

II. *Observations related to the center of interest* currently studied in connection with the school's program of associated ideas.

And how do we arrange for these? First, by means of questions skilfully put, the teacher endeavors to ascertain what the pupil already knows on the subject under consideration. The child expresses his ideas freely, and the teacher is enabled to supplement, if necessary to correct, such deductions as he may make from the facts as he knows them. This we call the *preparation of the lesson* and in conducting it, the teacher makes a point of relating the new subject as far as possible to others already studied, or familiar to the child from personal experience. Having completed the work of preparation, it remains for the teacher to co-ordinate, to group together the ideas that have been developed, to fill in any existing gaps.

We begin by sense experiences, proceed by comparisons and noting of differences, and so by a process of elaboration arrive at some generalization. It is thanks to this process of elaboration that reasoning is brought into play, for we are teaching

the child to reason are we not, when we cause him to form a synthesis, to arrive at a general conclusion for himself?

We may be sure that the child who has developed his own syntheses will be able to comprehend them, and to apply them to particular cases. Generalizations resulting from the preparation of the lesson are further impressed on his mind by the making of a drawing, or by a written sentence or paragraph in his note-book. This is followed by some application of the newly acquired ideas, sometimes in the form of a graphic résumé, sometimes as free work in composition, or as some practical application to his everyday life, or to his life in the school group. From the applications made it becomes easily apparent how far the ideas acquired have been really understood, and how far the child is able to make appropriate use of them. So far as possible we try to present all lessons in observation relating to the current "center of interest," in some prearranged sequence, so that the child's consideration of the phenomena and objects studied may be a well-ordered one. Thus, we generally begin by making it possible for the class to see the objects or phenomena to be considered; next we strive to expand this acquaintance by means of the other senses—touch, taste, smell, and the kinæsthetic sense. Then we proceed to experiences offering still more exact information.[1]

[1] *See* Outline for the preparation of lessons and Teacher's notes pp. 220-229.

### Measurement

To observe is more than to perceive. It is to establish likenesses of various kinds, to gather evidence as to differences and degrees of difference, to ascertain sequences, and spatial and temporal relationships, to make comparisons—in short to connect the things about us with our thinking.

But if our thinking is to be based on phenomena, our environment must contain the objects, beings, materials, requisite for providing such phenomena. The use of sense experiences and the elaboration of such experiences implies the presence of these and of actual contacts with them. And the school must realize this desideratum. How can it do so?

Personal experience will corroborate the teachings of child psychology, that it is possible to assimilate effectively only that which interests us. The child's interest must be awakened, and we must concern ourselves with its awakening. To quote Dr. Decroly: "Interest is the sluice-gate. By means of it the reservoir of attention is opened and directed. It is the stimulus by which nervous energy is released."

But in considering interest, we must not lose sight of the fact that the child's interest is not that of an adult, and if we would build on it we must first understand it.

If we would arouse the child's interest, we must begin by establishing a balance sheet of his previous attainments; we must know pretty well the contents of his mind; we must devise appropriate materials;

and in presenting them we must take into account the native tendency of the human mind to discriminate, and to identify. Indeed, it is by virtue of this process of comparison that the mind establishes relationships and forms syntheses. We will present then always two objects at least to the child's attention, objects different or like in respects more or less easy to discover according to the stage of his development.

Thus we may take as objects for comparison certain everyday things that may be regarded as natural units. Later on we will come to employ conventional units for making our comparisons. Examples of what we may call natural units would be: in relation to size, a pinch, a mouthful, a sip; again as to color, cherry red, lemon yellow; as to time, a flash, the wink of an eye; as to length, a foot, a finger, a hand.

Mlle. Monchamp in a paper[1] presented at the Congrès International de pédologie has outlined the different stages through which a child passes in his acquisition of number concepts. She classifies these as follows:

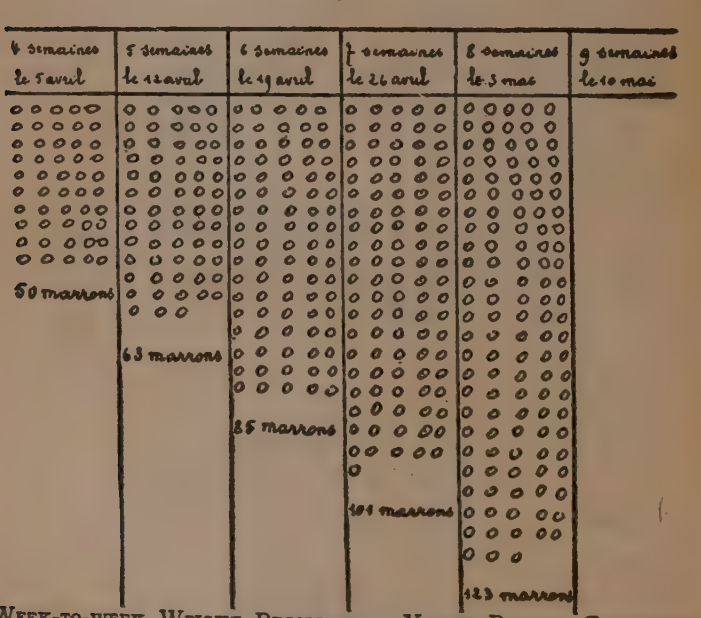
1. Recognition of the presence and absence of objects.
2. Ability to discriminate and identify objects.
3. Stage of repetition by use of objects.
4. Recognition of plurality and unity—the concept of two.

[1]Monchamp, "Comment naissent les idées de nombre, chez les enfants," in *Proc. Premier Congrès International de pédologie,* Vol. I, p. 260. Misch et Thron., 1911.

5. The concept of three.
6. Ability to range a series in the order of size; stage of synthesis.
7. The concept of 4—stage of analysis and synthesis.
8. The concept of 5—first concept of a fraction.

The number games devised by Dr. Decroly have been developed on the basis of these successive stages.

Exercises in measurement are given in connection with our lessons in observation and lead to the




WEEK-TO-WEEK WEIGHT RECORD OF A YOUNG RABBIT—CHESTNUTS USED AS THE UNIT OF MEASURE.

Fig. 2.—Measuring the growth of the plant and the amount of water it absorbs.

development of greater accuracy in perception. Here is an example of one such exercise: Seeds are put to sprout. Every day we observe the plant's increase in growth, but determination of the amount of growth, which can be made only approximately and clumsily by means of the senses, is rendered accurate by measurement and calculation. The root, the stem, and the leaves are measured and also the amount of water absorbed by the plant (Fig. 2). The children make drawings to show the results of these observations, using a size scale agreed on (Fig. 20). Later on, they may make graphs from these, and determine averages.

Again our children are led to note the fact that young rabbits, guinea pigs, mice, increase in weight. Weighing is done daily, strings of chestnuts and beans being used as weights. In their classrooms the children have or make the apparatus for rendering their sense impressions more accurate. The units used are chosen in accordance with the sense impressions to which they are related.

In the beginning the child himself furnishes the unit of measure. Thus, for example, to measure length he compares everything with the span of his arms, with the length of his foot, the size of his hand, or of his thumb.

One after another and little by little, these natural units are replaced by more conventional ones. He may look to fruits, leaves, or other natural products to aid in making comparisons of size, or use perhaps a nut, an egg, or some other common object.

All our work in number is considered under two heads:

1. The work called by Dr. Decroly "*measurement and comparison,*" that develops in connection with the exercises in observation.
2. Incidental exercises involving the mechanics of number.

We see to it that the work under both heads is based on direct perceptions, that the child himself measures, weighs, in every case acts. The object to be attained is not primarily the acquisition of a technique of operation, an objective that is entirely accessory—but the formation of a logical and accurate judgment, rendered more precise by the aid of measurement.

As for more complex operations, those involving decimals for example, we never propose them until the time arrives when the child himself realizes a need for greater accuracy in his researches and brings to the situation the resulting interest and, in consequence, a greater facility.

In the same way a new arithmetical process of any kind is never given to the child until he can apply it to problems that he has discovered for himself.

As, little by little, he learns the various numerical combinations, he has constant opportunity in case of difficulty to return to direct perceptions. Indeed, he has always before him a variety of small objects, such as beans, or fruits, related to the center of interest he is studying at the time, and he forms the habit of verifying the results of his operations.

These may be inaccurate to be sure, but they are never absurd.

For purposes of weighing, we make use of beans. The child makes strings of 10, 20, 30, 40, 50 and up to 100 beans. He counts by tens as he first counted by units, and later he counts by hundreds as he has counted by tens. For measuring volume we make use of a glass, a pitcher, a bucket, a thimble, a teaspoon, etc. The child's attention is drawn too, to the measurement of different properties observed in the objects that he is collecting, such as temperature, density, color, hardness, elasticity, flexibility, malleability, porosity, and he classifies things according to their degree of hardness, toughness, fusibility, etc. He has also a "store" in which he can buy and sell, weigh and measure, and thus establish a relationship between price and size or weight.

Still other opportunities for computations of practical importance are afforded by the classroom clock and the ideas gained from it as to duration of time. The child learns to reckon for himself the time necessary for the various daily activities.

We make frequent use also of Dr. Decroly's number games,[1] adapting them to any center of interest we may have under consideration at the time. That is to say, we use the principles on which the games are based as points of departure for a whole new series of materials in which the children take the greatest delight and by the use of which number concepts and combinations are speedily acquired.

[1]*See* Decroly and Monchamp, *L'initiation a l'activité intellectuelle et motrice par les jeux éducatifs,* Neuchâtel, Delachaux and Niestlé, 1914. Also Decroly and Degand, "Tests se rapportant a la notion de nombre," École Nationale, Feb. 1st, 1913.

ASSOCIATION

*. . . there is no single and uniform power of thought, but a multitude of different ways in which specific things—things observed, remembered, heard of, read about—evoke suggestions or ideas that are pertinent to the occasion and fruitful to the sequel. Training is such development of curiosity, suggestion, and habits of exploring and testing, as increases their scope and efficiency. A subject—any subject—is intellectual in the degree in which with any given person it succeeds in effecting this growth. On this view . . . method is concerned with providing conditions so adapted to individual needs and powers as to make for the permanent improvement of observation, suggestion, and investigation.*

—JOHN DEWEY, *How We Think.*

## CHAPTER IV

### ASSOCIATION

In our lessons of Association we try to lead the child to recognize relationships existing between the facts acquired by his own observation, and those he may recall from memory or gather at second hand. With this end in view, we encourage him to assemble the ideas he may have gained from personal experience, and draw from them his own conclusions, both intellectual and moral.

The teacher then proceeds to enlarge the domain of personal experience. At first this is done by means of pictures and the recital of stories, facts, happenings, and by descriptions of countries or of objects that are distant. Thus we appeal to the imagination of the child, and to that most precious possession—his innate curiosity. He is led to explore the fauna and flora of all the regions of the globe, at the bottom of the ocean, across the continents, among the different races of mankind. Thanks to the exact data he has already gathered at first hand, he is enabled to visualize more clearly the men, the plants, the animals he has never seen. He learns too, that there are people in other lands quite different from those he sees about him—men with other civilizations, other customs, other manners, men more industrious, more artistic, more skilful than

those of the western European nations. He sees that these men, these peoples construct their habitations, provide themselves with clothing and with the necessary supplies of food, and overcome many difficulties in so doing. And the field of his childish experience is enlarged accordingly.

Under favorable conditions these lessons lead to the collection of much illustrative material of one kind or another—material that can be utilized to great advantage in connection with our work. For while it is relatively easy to make objective that which lies at the child's own door, the things by which he is surrounded, that pass before his eyes, a certain series of facts and objects will of necessity be inaccessible to him, and a special importance attaches to the clarity of the conceptions he is able to form concerning these, since such conceptions influence his general syntheses, and these in turn may be expected to exert a very considerable influence on his understanding of life and, as a result, on his conduct.

It is necessary that he should learn to compare what he observes with whatever he may previously have observed that is analogous—that he learn to recall past experiences, and to make the effort of attention needed for such recalls. Moreover, he must be able to compare what is happening today, that which he witnesses in the environment which is his, with that which may be happening today elsewhere, and also with that which has happened in the past.

It is by such means that he will be enabled first to recognize in some degree the multiple relationships of the various facts he may uncover, of their causes and effects, and then to deduce from them some guiding principles of action for himself and for his group, for those who may depend on him, for those on whom he may be dependent, and indeed for humanity in general. Such are the purposes that underlie our lessons in association. The same end is attained in part by the lessons in observation.

Thanks to the lessons in association, the children come to appreciate the obligations they are under to their parents, and indeed to all preceding generations. For after they have had the experience of attempting certain things themselves, and have themselves encountered the same difficulties others have surmounted, they are far better able to understand how great such obligations are.

Thus for example, when, in acquainting themselves with primitive life, the children are called on to manufacture implements, arms, and tools like those employed by primitive man, the numerous difficulties encountered before they succeed in creating the most rudimentary utensils, and very imperfectly at best, result in a genuine appreciation of the importance attaching to manual labor, and of the progress that has been made by man in the manual arts.

To illustrate, when my class at Elementary School C. was studying bread, we took wheat in the ear, threshed it with flails made by the children, and

having thus removed the kernels of grain, crushed them between two stones as savages do. Thus, literally by the sweat of their brow, the children obtained flour of a sort, very coarse to be sure, but which they kneaded into a rude loaf. It was then baked between three bricks heated by a wood fire. When it was finished at last, though much less appetizing and very much darker than war bread, it was eaten, and more than that, it was pronounced excellent.

But next, comparisons must be made. With this idea we went to see the bakery of the Union Économique, where the children stood lost in admiration at the process by which a roll was made and baked at their request. Excellent as they had found the flavor of their own loaf, they came away convinced that the baker's roll was a far superior product.

Once when shelter was our topic of study, the children built a little house in the garden at school. They made the bricks and baked them and made the cement as well. Indeed, the house was entirely of their own construction. It had a wooden roof covered with moss which they had brought for the purpose from the "*forêt,*" the great park of Brussels. It was a real house in every particular, with windows and a door, and great was the admiration they felt for their little *chef d'oeuvre.* All declared that a real workman had never achieved its equal.

Unhappily, or happily perhaps, the house had been built out in the garden, and one morning after a night of thunderstorms, what did our young architects find when they arrived at school? Their walls

had fallen in, their roof had blown off! What a fiasco! But when, recovering from their first surprise, they turned their glances toward the school—that was seen to have weathered the gale! And what were the conclusions formed in those young heads? Whatever they may have been, we may be sure they were not to the disadvantage of those who built the schoolhouse.

Another time we attempted to make ourselves wooden spoons. What a task! And in the end how mediocre were the results! On that occasion the children compared the results of their own efforts with those attained by the natives of the Congo, as shown by the specimens exhibited in the Musée de Tervueren. They compared them too, with those of the man who makes the common spoons we use every day at school. The differences were sufficiently striking!

And how many times were we forced to make comparisons of this sort after we had fashioned clothing—dresses, hats, coats—and beds, candles, even a whole village on one occasion. (*See* Fig. 10).

In all such experiences the difficulties encountered at every step have invariably served to increase the children's appreciation of the value of manual labor.

But for the most part the comparisons we make are of a different kind. For example, the girls in my class at Elementary School C, after studying the wax and the tallow candle in their lessons of observation, considered for their work in association the

relative advantages and disadvantages of these two means of illumination, and the uses and possibilities of each. After that they studied the history of the candle, and finally the sources of the different materials used in its manufacture.

As I have already said, the knowledge of relationships acquired in the lessons of association does not constitute their sole purpose. They are also of importance from the moral and social point of view, because from them the child gains an idea of the obligations owed his fellow-creatures. Little by little he is brought to understand the fact that without the contribution of each one, it would be impossible for him to live, and in this way they develop in him a consciousness of the solidarity of human interests and an attitude of sympathy toward his fellow-man.

They have also a third purpose: they acquaint the child with what we designate as "determinism." How, for example, shall we give him to understand the reason why an object invariably has a certain shape, or must be made of some special material? If we give him the opportunity to make such an object for himself, he often discovers the answers to such questions at once.

Like the lessons in observation, the lessons in association may be of an occasional or incidental nature. Any important or unforeseen circumstance may afford suitable material for them.

# EXPRESSION

*On the one hand, then, it is necessary to present to the child the objects and facts that may serve as a basis for ideas, and for their verbal expression, in a way that shall best meet the demands of the mental mechanism at his disposal. On the other hand, in the nature of things, these are precisely the objects and facts that are related to the essential needs of life, that are the most numerous, the most striking. It is thanks to this happy combination of circumstances that the first attempts of the child at inductive methods are brought about with so much ease. It is by reason of it that the forms of verbal expression with all their shades of meaning, relations, temporal and spatial, qualitative and quantitative, and their various logical relationships, become fixed under the most favorable conditions, through the dynamics of affectivity which dominate and orient their acquisition.*

—Ovide Decroly, *Les Intérêts de l'Enfant et le Programme de l'école primaire.*

*And what is to be done with pictures, with charts, with the stuffed and mounted specimens, the specimens pressed and dried that fill our school museums side by side with physical apparatus never used, and the cases of minerals seen perhaps once in the course of a year? To my way of thinking they still have their part to play if only they serve to recall things previously seen. But more effective for our purposes will be the children's own drawings, the animals, plants, and minerals they may collect for themselves, the apparatus devised in the classroom or at home from such materials as may be at hand, and mineral specimens gathered by young geologists in the field.*

—Ovide Decroly, *Conferences at Anderlecht.*

# CHAPTER V

## EXPRESSION

THE school activities which Dr. Decroly classifies under the head of *Expression* are of two general kinds, those concerned with *Concrete Expression*—that is, with clay work, cutting, painting, drawing, and manual activities of every sort, and *Abstract Expression*—that is to say, those concerned with language as reading, writing (inclusive of spelling), original composition work, or class discussions.

Manual activities he holds to be of the highest importance. But their value is so widely recognized by educators today that there is little need to undertake discussion of it here. We will merely note in passing that the school's manual activities fall naturally into two classes:

1. Projects that may be undertaken in connection with the subject matter program. (*See* Figs. 3, 8, 9, 10, 11, 12, 13, 14.)
2. Incidental activities, especially those connected with our gardens, and the care of our animal pets. (*See* Frontispiece, Fig. 4.)

It will hardly be necessary to describe the more familiar among the various activities belonging to the work in expression; several examples will be cited in a later chapter describing the experiment at Elementary School C.[1] and we will therefore confine

[1] *See* Chapter VIII.

ourselves for the present to describing briefly the use made of the illustrative materials collected by the children, and of the note-books kept in connection with the work done in observation and association.

*Illustrative materials:* So far as possible the children themselves undertake to gather the illustrative materials used in their class. Every day they bring various objects of interest to school, and these are at once classified under the teacher's guidance. A very large table stands in the classroom, and this is divided into three well-defined sections that are labeled *Animal, Vegetable, Mineral.* Everything the child brings in he places for himself in the section appropriate to its kind. Or, if he does not know the proper classification, as often happens with such diverse material as bits of copper, rubber, wood, stones, pebbles, plants, and miscellaneous things that come to hand, he places his specimen in a special cabinet that is set apart for objects whose classification is unknown. From time to time, as the materials brought by the children collect in this cabinet, they are emptied out and everyone assists in classifying the contents.

The schoolroom is supplied with three other cabinets, in addition to this one for objects waiting to be classified. In the first we keep the things that we have made; in the second, materials to be made up; and in the third, old or worn-out things that may be made to serve other purposes, and are therefore of interest from the point of view of salvage.

Our use of illustrative materials demands too, a

careful filing of pictures collected, and this is also taken care of by the children. Large envelopes are hung on the classroom walls. Each bears a label, and each of these labels corresponds to some topic included in the subject matter program. The envelopes used by my class during the first year were labeled as follows: Clothing, Shelter, Food, Means of Transport, Games, Plants, Fruits, Animals, Miscellaneous.

From time to time we classify the pictures we have collected, and sometimes we have a silent period in connection with this part of the work. The children fold their arms and hide their faces. The pictures are distributed among them at random, some fifteen to each. They look them over and set to work. Each classifies the pictures given him according to the labels used on the wall envelopes. As soon as an individual has finished his classification, the teacher verifies it, and then on tiptoe and still in silence each one places the proper pictures in the envelope waiting for them. It is a curious sight to see the children going to and fro during this exercise, trying to avoid each other, all on tiptoe, all intent on placing their pictures in the proper envelope. If any one appears uncertain, a comrade will noiselessly come to his aid. His work finished, each returns to his seat and begins free work of some kind such as drawing or number games, while waiting for the slower ones to finish.

Must one insist that such an exercise is of very definite value? It will be evident that it calls into play not only the mental effort demanded by the

work of classifying, but concentration of the child's attention and a considerable degree of self-control. For it requires the maintaining of silence during a pretty long period, and under conditions especially favorable to disorder—limited space, the same envelope needed by several children at the same time, and the resulting possibilities for collisions and jostling in the classroom.

In the fourth year we undertake, in addition to the collecting and filing of pictures, the collecting and filing of written references dealing with the subjects we are studying, whether these are found in books, pamphlets, newspaper articles, or elsewhere.

The search for appropriate written material is largely the children's own work, but at the same time they come to the teacher for help in it. We avail ourselves of every possible opportunity to procure books, as well as advertising pamphlets, and catalogues from all sorts of commercial houses. Such material has rarely been refused us when asked for in the name of the school. The pamphlets, journals, catalogues collected are clipped in school or at home, and the clippings carefully arranged.

And now, how do we use the various materials and pictures so carefully collected and classified? In our lessons in observation, let the subject be what it will, some pupil will be able to find among the things the class has collected, the necessary materials for making comparisons, differentiating, and experimenting. Is it a question of something to illustrate the work being done? It is speedily brought to light —on clothing, if clothing is under discussion—on food, if the subject happens to be food.

Anyone may look for and take the thing he needs. The materials are community property and as such are at the disposal of members of the class group.

In the second year the school encourages the children to begin making their own collections and classifying them in their homes. From this time they begin to take a very lively interest in their collections and pictures. Often when they are asked at home what they would like for birthday and holiday presents, they will express the wish for pictures to illustrate their note-books and make them more interesting and attractive.

*The note-books for observation and association:* Our lessons in observation and association are summed up in big note-books and illustrated by drawings in pencil, pen, or color, and with cut-out pictures, and specimens as well. These note-books are often remarkable examples of workmanship, kept with the utmost care, and pored over by their owners at frequent intervals with the greatest delight and satisfaction—a fact of undoubted value from the standpoint of affording constant review of the subject matter they summarize. The cuts showing various pages from the note-books in observation and association kept by an individual pupil in my class at Elementary School C. will afford the reader some idea of the development of her work from the beginning of the first year to the end of the fourth year of school. (*See* Figs. 15, 16, 17, 18, 19.)[1]

[1]The class conferences, free work in composition, and making of charts for the graphic presentation of summaries and recapitulations of subject matter, have still to be described. They are discussed in detail in Chapter VIII.

# READING AND WRITING

*We come now to the consideration of reading. In the eyes of many it is our reading method that constitutes the most important feature of the new school plan. And as a matter of fact it has been an unquestionable element of success, since without it the whole economy of the plan during the first years would be upset, and we would find ourselves in the presence of difficulties that appear insurmountable. At the same time,—and this is most important,—we must not accord it a place on a par with the work in observation, or with the various activities in expression.*

—OVIDE DECROLY, *Conferences at Anderlecht.*

## CHAPTER VI

### READING AND WRITING

Various terms have been employed to describe Dr. Decroly's teaching of reading. It has been called visual-natural, ideo-visual, and again visual ideographic, and any one of these terms is applicable. Since it is based on the psychology of the child, it may well be called visual-natural; since it makes use of the idea conveyed by a word as the point of departure and basis for teaching, ideo-visual and visual ideographic are equally appropriate terms. It is by no means a new idea. Methods somewhat similar were used by Itard and Bourneville in their teaching of defectives.

Olivier may be said to have initiated something of the kind toward the end of the eighteenth century, since he took the sounds and not the names of the letters as the point of departure in teaching, and began by dividing the sentence into words, and words into their phonetic elements. He was the first to place the teaching of reading on a physiological basis. Moreover, he did not believe the child should read anything without understanding it, and the text once understood, he required his pupils to commit it to memory.

In the first half of the nineteenth century Jacotot proposed an analogous procedure. His work inau-

gurated the use of visual methods. He wrote: "Do not teach the child his letters first, then syllables, then words. Have him say, read over, learn by heart a sentence or a page of something. He will divide it for himself into words, syllables, and letters, and these he will be able to recognize on another page.

Vogel greatly improved the system of Jacotot, employing it in the development of his own method and at the same time combining it with the use of illustrations for purposes of direct perception. This was the origin of what is generally known as the analytic, synthetic or reading-writing method.

It is not asserting too much, however, to say that the perfecting of these principles has been due to Dr. Decroly, who has at the same time made them applicable to the teaching of both normal and defective children. As we have previously stated, his ideo-visual methods have been used in his institute for exceptional children since 1904. Later, they were adopted by a number of the special classes for defective children in the city schools of Brussels. They have been used in the school of the rue de l'Ermitage, and subsequently in the Decroly classes of the Brussels schools.

One of the greatest advantages attaching to this kind of teaching is the fact that reading can thereby be made to relate directly to any "center of interest" that may be under consideration in connection with the school's program of subject matter. In this as in other particulars it meets the conditions imposed from the threefold viewpoint of psychology,

methodology, and pedagogy. But let us consider these viewpoints in detail.

*Psychology*—Dr. Decroly and Mlle. Degand in their study of reading[1] have shown that in general, when a child is learning to read, visual comprehension of the graphic symbols, verbal expression, the association of sounds with their graphic representation in the text, the written form and spelling of the symbols, appear to him as but a single process. Yet it will be evident that the act of reading calls for a combination of various mental processes:

Those connected with sight.
Those connected with hearing.
Those involved in speech and writing.
Those involved in comprehension.

Even so we may safely say that, at least so far as the French language is concerned, the mental functions involved in reading are predominantly visual. The facts are there to prove it. We may see the text, understand it, even execute the order it gives, without employing verbal expression; indeed, this silent reading is the most important kind, the kind most frequently employed.

Reading, then, is above all a visual process. And we may say as well that sight is a sense more objective, more concrete than hearing. It is the sense

---

[1]Decroly et Degand, "Contributions à la pédagogie de la lecture et de l'écriture," in *Archives de psychologie,* VI, 1907, p. 339.

*Id.,* "La lecture élémentaire," Reports presented at the general meeting of the Société belge de Pédotechnie, December 20, 1909.

*Id.,* "La lecture comme facteur du développement intellectuel," in *Zuid en Noord,* 1910, p. 7.

that, next after the sense of touch, gives us our most accurate conceptions of our surroundings.

The observations of Preyer, Tiedeman, Perez, and of many other psychologists who have followed the development of young children have shown that sight is one of the senses that develops most rapidly after birth. Their investigations show that sight develops more rapidly than hearing. Indeed, they affirm—although this remains to be verified—that an infant from four to six months old will recognize the face of its mother, while her voice will not be recognized until much later.

There would seem to be nothing illogical then in the employment of visual methods for the teaching of reading. The question is rather, How shall such methods be applied? and we may discover the answer if we return to a consideration of the young child and the process employed by his mother in teaching him to speak. Does she address him by letters? By syllables? By words? Does she not make use rather of sentences? Of ideas? Until little by little the child begins to express himself. Why not follow this same method in the teaching of reading? Why not take for our guide the manner in which speech develops in the little child. He understands what is said to him, does he not? before he attempts to express himself in turn. He will understand the commands "Come here!" "Get up!" "Give your hand!" before he is able to reply "I'm coming!" "I'm getting up!" "Take my hand!" And if he understands these commands by the aid

of his auditory centers, wherefore should he not understand them by the aid of his visual centers? His eyes, even more than his ears, indeed, have aided him to arrive at such understanding—that is, if only a sufficient number of repetitions have been employed for a visual image to fix itself as well as the auditory image.

It should be recognized too, that the written sentence conveying an idea constitutes the most concrete form possible for an idea that is expressed in words.

If we stop to consider speech and writing, we will realize that neither one nor the other began with the letter. They began with the sound and the symbol having sentence value; and if we observe the speech of children we will find that the sentence precedes the word, that in general the word used by the young child has for him the significance of a sentence, even of two. For example the child that says "papa" does not mean to say simply "papa," but rather, "There is papa"—"Take me, papa"—"I love papa"—"Come here, papa"—"Papa give me the toy"—

But, the objection may be raised, if that is the way you teach, what becomes of analysis, and what becomes of generalization? Analysis comes as a development. The child will analyze for himself as soon as he has reached a certain stage in his learning.

And what is true of reading holds true of writing, just as the child, after hearing spoken language,

attempts to convey his thoughts orally in a fashion more and more exact; in the same way, having seen and understood written speech, he will make use of that as soon as he is sufficiently mature, either in the form of drawing or writing. Moreover, he will do this all the more successfully in that his learning has been by visual processes. And for this reason our teaching must provide:

1. Visual methods.
2. The use of the sentence and of words that are concrete in their meaning.
3. Repetitions in great number—made possible by the use of games that hold the child's interest.
4. Analysis naturally arrived at by the child himself.
5. Reading material directly related to the subject matter taught.

*Methodology*—Teachers are well aware that the subject matter of instruction is supposed to deal first with the simple, then with the complex, with the concrete at first and later with the abstract. But it would be well if some better understanding could be reached as to what may be rightly called "simple."

We know that by the method commonly used, one begins with a syllable or a letter before learning the word and, later, the sentence.[1] Is that the course

[1]The American reader will recognize from this and similar statements that methods commonly employed in continental schools for teaching reading differ considerably from the "word-sentence method" now widely used in the United States.

the mind would naturally follow? If we wish someone to make the portrait of a person, do we show him first the different parts of that person separately? Certainly not! The simple sentence, of concrete meaning, calling to the child's mind something experienced, some reality, is to be preferred to the letter and to the syllable, both of which are abstract and devoid of meaning in themselves. We must not lose sight of the fact that the letter and the sound it represents are in reality the final analysis of language that the human mind has made.

We have already stated that by means of his auditory centers the child is able to understand commands before he can express them himself. And if he is able to understand the necessary auditory symbols, why should he not be able to understand the visual symbols? Before he can begin to express them graphically, he will be able to recognize them by sight quite as readily, if not more readily, than he did when listening to his mother's speech, since from the psychological point of view there is no difference between perceiving and understanding a sentence by hearing it, and perceiving and understanding a sentence by seeing it. The same processes of association and of forming judgments—are involved; the only difference lies in the centers receiving the impressions.

At the beginning, reading material should be presented in the form of commands. The command is a natural form of expression. Generally, it is accompanied by gestures and these constitute a form of

communication that greatly facilitates comprehension. Moreover, the command is the mode of speech most familiar to the child. He encounters it every day and has ever since he came into the world. And this is especially true if it concerns an act related to any of his needs. Moreover, as all must recognize, an act related to his needs will be concerned with concrete things and will make a special appeal to interest. It has a purpose that the child can appreciate, and there is special intellectual value in the fact that its comprehension demands a certain degree of exactness.

To continue our observations on the development of the young child, we may note that he first comes to understand the commands of his mother, and that his own remarks and questions follow later. He begins to ask the why and wherefore of everything and the names of things he sees. Spontaneously and without realizing that she does so, his mother is satisfying this curiosity when she says to him: "Hear the bird sing!" "Look, the little boy is crying!" It is in this fashion indeed that the child acquires his early ideas and concepts. Why not use a similar method when we would impart ideas and concepts by means of visual symbols?

The child arrives at understanding of the spoken word only after many repetitions. The same is true of written language. He must see the written symbols over and over again before he arrives at attributing proper significance to them. But as he grows older, much less time and fewer repetitions will of

course be necessary for the acquisition of new visual symbols. He will acquire them more quickly than he did the auditory symbols.

Again the child will analyze the visual symbols by the same process he has already used for the analysis of auditory symbols. After he has frequently heard his mother repeat "Shut the door," "Open the window," he understands her when she says "Shut the window," "Open the door." The same thing will be true in the case of visual symbols, the only difference lying in the fact that visual and not auditory centers are involved.

*Pedagogy*—Our teaching makes possible the effective correlation of reading with the other branches of the curriculum. This is of particular value with a program of subject matter organized about "centers of interest," since the facts experienced and observed by the child can be made the basis of the reading materials used, and from the beginning he may summarize his observations by means of a short sentence or two that he first formulates orally for himself.

In this way he will, from the first, associate the written word with the idea and his comprehension will not be held back by technical difficulties. He will never have to read words that are meaningless to him. His reading will be invariably meaningful, and this may be said to constitute the greatest of the advantages in this kind of teaching.

In developing our classroom practice, the following important principles are kept in mind:

1. That the written symbols must be associated with the actual things and facts they serve to represent, and that the resulting reading material must relate to the subject matter dealt with in the other branches of instruction.
2. That at the right moment we must facilitate analysis as an aid to recognition of the written symbol, and to make possible the reading of new symbols as the child may meet them.

Thus we no longer begin by analyzing a word according to its sound; we no longer study the sounds in words for their own sake, and try to systematize such study. We follow the natural order of acquisition, and the natural order of instruction, and reading becomes what it ought to be, at first an exercise in expression, a branch associated with other forms of expression, and soon a means of acquiring information. The child's enthusiasm is preserved. He does not lose his spontaneity. His field of observation enlarges naturally and since we fix no limits in advance, his various abilities are allowed free and harmonious development. And after all, is not that the goal that education ever seeks to attain?

We may summarize by saying that in our teaching we begin with the concrete and lead to the abstract by a natural sequence. We acquaint the child first with things, then with sentences; words come last, and finally the child separates the word into its abstract elements, at the time he is ready to make generalizations.

Before beginning our lessons in reading, we test the children for memory and for visual attention, using the tests arranged by Dr. Decroly and Mlle. Degand.[1] The use of these tests enables us also to reply to an objection that is sometimes raised—namely, that our methods of teaching are suited only to children of the visual type.

And what has been our experience with children of other sensory types? What showing do they make under this kind of teaching? It is a fact that up to the present all children of normal mentality who have been taught in the Decroly classes, even when the teacher has had very little experience in such teaching, have learned to read very quickly. At the same time it will be seen to have advantages even for the children of auditory type, since it affords constant exercise of the visual memory which, in the case of such individuals, is undeveloped but which they cannot do without.

Our teaching is certainly an aid to spelling, especially to the spelling of French, a language particularly well adapted to the use of visual methods. Consider only the various ways in which it is possible to write the French syllable *an, en, ant, and, amp, emp, emps, ang, eng, ans, ens, end, ent, am, hen,* without counting the confusion resulting from *en* sounded as *in*—and it will be easy to appreciate

---

[1]Decroly and Degand, "Expérience de mémoire visuelle verbale et de mémoire des images chez les enfants normaux et anormaux," in *Année psychologique,* 1907.

*Id.*, "Faits de psychologie individuelle et de psychologie expérimentale, in *École Nationale,* 1909, Vol. 10, p. 201.

that only visual memory is capable of retaining the multiple aspects of a sound. Truly, those who are lacking in visual memory are in a bad way, they can never hope to master the rules of our accepted spelling.

The sound *an*—examples

Caen, ruban, quand, pourtant, Jean, printemps, bambou, banc, étang, paon, emblème, différend, camp, tisserand, dedans, lenteur, exemple, hareng, encens, froment, appréhender, éloquence.

And the same holds true of other sounds.

The results of our preliminary tests at Elementary School C. gave the following order as the one in which the 52 children tested retained visual images:

1. Pictures.
2. Sentences.
3. Words.
4. Geometric forms.
5. Lastly, the letters.

Up to the present our tests have not disclosed a single child of purely auditory type. This does not prove of course that such a type may not exist. Nevertheless, we are at a loss to understand the objection raised by Mlle. Descoeudres who says: "The natural method is admirably adapted to children of the visual type; but one must remember there are other sensory types."[1] I have personally

[1]Descoeudres, A., *L'éducation des enfants anormaux* (1st edition, Delachaux and Niestlé).

The reader will be interested to know that since the appearance of Mlle. Hamaïde's discussion of her successful experiment, and in view

Fig. 3.—Setting up the model class room. Children of the third year class.

taught 85 children to read using ideo-visual methods and up to the present have never encountered any difficulties of the kind Mlle. Descoeudres foresees. In addition, I have made inquiry of the teachers in charge of 10 Decroly classes organized in the Brussels city schools. As each class averages about 25 children, the total number concerned would be about 250, but the teachers questioned on this point have not yet reported a single case of difficulty due to sensory type. The children who were found unteachable in reading proved in every instance to be mental defectives, and could hardly have acquired the art of reading more easily by an auditory method.

"Goetze," says Mlle. Descoeudres again, "calls the natural method 'the method of totality.' According to him this kind of teaching, which leads to overtaxing the memory, really amounts to the adoption of such methods as are used by the Chinese." To this objection I can only reply that throughout the experience recorded here, memorization of the word symbols has been accomplished without any difficulty, even on the part of the youngest children considered. Moreover, following the line of experiment previously tried by Dr. Decroly, Professor Claparède, and others, I found my little niece at three years of age able to pick out 32 written words, the names of well-known objects, without making a mis-

---

of the experience in Decroly classes elsewhere in the Brussels public schools, Mlle. Descoeudres has become convinced of the desirability of such teaching, and in the second edition of her book revises the passages cited here. The discussion is retained in these pages, however, because it is typical of the objections Dr. Decroly and his co-workers have constantly to meet.—Ed.

take. We must not forget, too, that a vocabulary of only about 400 words will afford all the different combinations for making any generalizations necessary in reading French. Such a number is far below that required of the Chinese mandarins. Moreover, among the children of my classes there were always certain ones who arrived at generalizations earlier than the average, and so demonstrated that the number of word symbols necessary as a preliminary is not the same for different individuals.

Thus the objection of Goetze will hardly stand. The real reason that has led Mlle. Descoeudres to discard our ideo-visual methods, in spite of the advantages she has recognized for them, has been stated by her as follows: "In many cases we must teach in the way that will achieve results most quickly, so that the children will be free to store their minds with the facts calculated to be most useful to them in their after lives. Reading must be acquired, and the natural method is the longer method." True enough, if we are to wait for the child himself to arrive at analysis and generalizations, without in any way aiding the process and facilitating such comparisons as will lead him, first, to a knowledge of the separate words, then of their syllables, and afterwards of the sounds of letters. But if, by means of grouping, we bring about the juxtaposition of those symbols presenting similarities in the manner to be presently described, the child will begin to read more quickly by this kind of teaching than by any other.

And here let me summarize the results in reading obtained in my two first-grade classes at Elementary School C.

*1st group,* 1916-1917—Of 20 children averaging nearly 6 years of age on entering school: 1 could read any text, no matter what, after 6 weeks; 16 after 3 months; 2 after 4 months; 1 at the end of the school year. This last child was troubled with a speech defect.

*2nd group,* 1920-1921—Of 23 children averaging just 6 years of age on entrance: 3 after 2 months could read any text no matter what; 3 after 4 months; 9 after 6 months; 5 after 8 months; 3 have experienced some slight difficulty but will surely read by the end of the year. All 3 are very young children being only 5 and 5½ years of age on entrance.

The difference in the results obtained by these two groups is to be explained, first, because we gave less time to reading in the second experiment, since the first had proved the practicality of such teaching for the type of children enrolled by the school; second, because of differing mentality in the two groups.

City school No. 17, rue des Six-Jetons, records the following results in reading in its Decroly classes:

*Class* 1—At Easter all the children read fluently with one exception.

*Class* 2—At Easter all the children read except two who had experienced special difficulty in learning.

In the school of the rue de l'Ermitage the majority of the children, even under a teacher who is using the method for the first time, are able to read at Easter as well as second-grade children taught in the usual way.

In spite of the successful results attending these experiments with first-grade children, it would doubtless be preferable if the study of reading could be deferred until after the first year at school as M. Duvillard has recommended in his book, *Les tendances actuelles de l'enseignment primaire.*[1] Indeed, Dr. Decroly believes it desirable for children to observe and experience at first hand for as long a time as possible before acquiring the art of reading.[2]

And since this kind of teaching makes possible the gain of a year in the reading progress of the average child, the time saved thereby could easily make possible a preliminary year devoted to observation and activities other than the acquisition of the tool subjects.[3]

Another reason for delaying the acquisition of reading lies in the fact that there are but few good books adapted to the use of children of first-grade

---

[1]Duvillard, *Les tendances actuelles de l'enseignment primaire* (Delachaux and Niestlé, Neuchâtel, 1920).

[2]Decroly and Degand, *op. cit.*

[3]It is of interest to compare the opinions expressed in this and the following paragraphs with those held by many American educators and with the results obtained by the City and Country School in New York where the teaching of reading is deferred until the second grade. See *Experimental Practice in the City and Country School,* Edited by Caroline Pratt (E. P. Dutton Co., New York, 1924).—Ed.

age. Again, does it not seem a better plan to teach the child to read for himself from the great book of Nature before we place at his disposal those lesser sources from which he may gain the ideas of others, at the same time that he may lose the habit of observing for himself, and of thinking out of his own experience?

Mlle. Descoeudres raises a final objection when she says, "Reading words prematurely conduces to guessing at words, a habit children sometimes retain for a long time." But may not such guessing be an indication that the child is using thought, that his reading wakes in him an idea, so that he attaches more importance to the meaning than to the symbol? However that may be, the habit of guessing at the word disappears readily enough.

It is not too much to say that, from every standpoint, ideo-visual teaching affords results superior to those obtained by standard methods. Dr. Schumann, who is cited by Mlle. Descoeudres, says of it: "If, by its use, it is possible for the majority of children to acquire the habits necessary for fluent reading, the associations between the spoken word symbol and the phonetic elements of which it is composed, and this without first learning the use of letters, the method constitutes a simplification." Dr. Schumann is right in this opinion. The ideo-visual methods do constitute a simplification and are destined to play a most important part in the future teaching of reading.

*Summary of Technique*[1]—We distinguish four well-defined stages in our teaching of reading. They are as follows:

FIRST STAGE

We begin with the sentence in the form of a command—that is, we present the symbol of a complete idea, something that is concrete, abstractions being left for a later period. Each command is directly related to the center of interest studied; for example, at the beginning of the year when our center of interest may be "fruits," such commands as the following can made use of:

Bring me the pear.
Put the pear on the table.
Cut the pear in two.
Eat half of the pear.
Give the pear to Annie.

These commands are first given orally in connection with the children's work in observation. The children execute them as they are given. They are then written on separate placards in very large characters and placed before the class. At first the children may not say the words aloud. They examine the written symbol and undertake to execute the command it conveys. By their actions they prove whether they have understood it. Children, active as they are, love this lesson which permits

[1]The technique described has been developed in the teaching of normal children. At Dr. Decroly's institute for the instruction of exceptional children the needs of special individuals necessitate various modifications. See the book by Mme. Dekock and Mlle. Secelle *L'éducation des enfants anormaux* (Maloine, Paris, 1920).

them to walk, run, play, even to eat sometimes.

In the beginning, we must repeat, the reading is a question merely of visual recognition, the children showing by their actions whether they attach the right meaning to the graphic symbol.

How much time should be spent in exercises of this kind? It is not easy to estimate with any exactness, since it depends on the mental development of the children taught. A fortnight proved sufficient for the little girls in my classes at Elementary School C. But they were children whose families were in good circumstances, and came from homes where the children receive much attention, and where they hear a liberal amount of conversation. In schools where the average development of the children is less advanced, one should undoubtedly plan to devote a little more time to this first stage, while for the retarded and exceptional child it constitutes a very necessary pre-reading experience, and the time devoted to it must be much longer.

After the first fortnight at Elementary School C, we wrote the names of the various objects in the classroom on separate placards, and placed each on the object named until everything in the room bore its written label. These visual word symbols did not make their appearance all at once. Every day we added a few new ones to those previously learned. In the same way the children's names were written on arm-bands. Each child wore hers and soon recognized her own name, that of her neighbor, and before long the names of all her classmates.

Apropos of this, it may be noted that, as a general thing, the children learned to recognize the written word symbols of their companions' names more quickly than they did the spoken names.

Here are a few of the labels used:

| | | |
|---|---|---|
| the door | the closet | the shelves |
| annie | liliane | renée |

SECOND STAGE

Our whole vocabulary of written symbols is then presented in another fashion. The various commands, names of the classroom objects, and names of the children are written on separate cards and then on the blackboard. A few lessons suffice for the child to compare and identify the commands and words written on the board with those written on the cards.

At this point we begin to make use of games based on the principles of Dr. Decroly's "jeux éducatifs,"[1] to ensure the making of numerous repetitions. Each child possesses a box with a collection of little cards on which are written the commands he knows and the names he knows. We play with these in

[1]Decroly and Monchamp, "L'initiation a l'activité intellectuelle et motrice par les jeux éducatifs," in *Collection d'actualités pedagogiques de l'Institute J. J. Rousseau* (Delachaux et Niestlé, Pub., Neuchâtel, Switzerland, 1914).

various ways. The following examples will show how we secure the necessary repetitions.

1. One of the written commands is placed before the class (either on the original placard or on the blackboard); each child looks among his little cards and finds its duplicate. He shows it to the teacher and performs the act indicated.

2. Similarly, when the name of an object is displayed, the child picks it out from among his cards.

3. The teacher may say the word, and let him find it and show it to her.

4. Or sometimes the teacher may take all her placards and distribute them among the children. Those who find a command in their lot, show by their actions that they understand it. Or if one finds the name of another child, he places the card before the child whose name it bears. A card bearing the name of an object in the room is pinned to the object named.

*Game II.* In the same way we employ the principles of the "jeux éducatifs" in connection with the center of interest we are studying. The materials used can be made by the children of the older classes; indeed, their manufacture constitutes an excellent kind of practice in drawing and penmanship. It is of value for another reason as well, for it creates a spirit of solidarity within the school.

Thus, for example, when our center of interest is "fruits" we make up a game of lotto.[1] On every card we paste a dozen pictures of different fruits

[1]Game II, Decroly and Monchamp, *op. cit.*, p. 129.

drawn by some of the older children. Under each fruit its name is written in ordinary script. On the back of the card an envelope is pasted, in which are placed little pasteboard slips each with the name of one of the fruits written on it. The lotto set lends itself to a series of exercises of various degrees of difficulty.

At the beginning we ask simply for recognition of the visual symbols. On the name written below each picture the child places the slip bearing the same written word. Thus the first exercise is one of comparison.

When he can do this without hesitation, the child covers the names written on the big card with a strip of paper, and then tries to place the slip bearing the proper word symbol under each picture. At this stage he has no copy to work from, the exercise is therefore somewhat more difficult and, as will be recognized, is an exercise of memory and no longer one of comparison.

The game is then made still more difficult. Instead of presenting only the ten word symbols appearing on the lotto card, we present twenty slips, ten of them bearing new words. The right ones must be chosen from among this larger number.

*Game III. The little boxes.*[1]—The children take great interest in this game, and it lends itself equally well to any modifications necessitated by the different centers of interest. To illustrate, taking

[1]Decroly and Monchamp, *op. cit.*, p. 130.
*See also,* Descoeudres, *op. cit.*, p. 237.

as before our first center of interest, "fruits," the child takes an empty match-box and places in it perhaps an acorn, in another he puts a chestnut, and similar fruits in others. The various names are written on the box covers. The child takes off the covers, mixes them and then tries to put each back on the proper box, the cover showing the word "chestnut," on the box containing the chestnut. We increase the number of these boxes as fast as the necessary visual symbols are acquired. This game affords at once a reading lesson and an excellent exercise in direct perception. From it the child learns the visual word symbol in direct association with the object it describes. It is a great favorite with the children.

### THIRD STAGE

The children next begin to summarize their lessons in observation by means of brief sentences written in their note-books. (My classes at Elementary School C. began to do this three weeks after we commenced our reading lessons.) The sentences are always accompanied by drawings, for from the first we encourage the child to express his ideas by drawing as freely as by writing. At this stage a new kind of game begins.

*Game IV, The little pictures.*[1]—Short sentences are written under pictures that summarize some lesson in observation. These are written again on separate slips. The game is then played as follows:

[1]Decroly and Monchamp, *op. cit.*, p. 135.

1. The child begins picking out the sentences that are alike, and arranging them in order, by the mere recognition of like symbols.

2. The sentences written below the pictures are then covered up, and the child distributes the sentences written on the slips to correspond with the proper pictures. The exercise in comparison again becomes an exercise in memory.

3. A third copy of the sentences is presented to the child. This time they have been divided into words and the child puts them together again, first according to the model sentence written beneath the pictures, then from memory and without a model.

4. The number of pictures that can be used in this way is of course unlimited, and each game becomes constantly more difficult, as new observations are added to the first ones.

The games described can be used for group work, or by the individual child as may be desired. At times we distribute the pictures among the children with no accompanying sentences, write the sentences on the board, one at a time, and ask the children to give back the corresponding picture. Thus the work is varied continually. The important thing is to supply the necessary materials in great variety and in a form to hold the children's attention.

*Writing*—We must here draw attention to the question of writing. A child copies the written word symbol in the same way that he would copy a design, and for the normal child writing constitutes a very simple and easy mechanical process. Our chil-

dren learn to write readily without special instruction. Their first attempts are preceded by free work in drawing and by modeling. They model the sentences in clay before writing them, and this practice we have found yields excellent results.

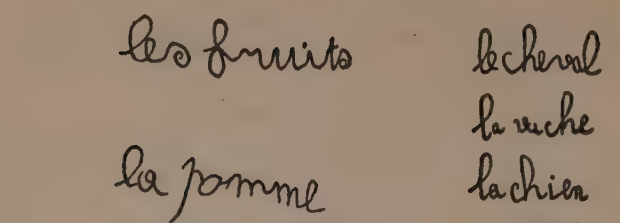
The examples on page 82 show the development made in handwriting by two children who had never written before entering my class. The first child, Renee A., was 5½ years old in October when school opened; the second, Georgette M., was 5 years and 10 months old.

But the child must arrive at the expression of his thoughts in writing. He can now recognize many sentences at sight, but he must be able to retain the visual image of the sentence before he will be able to write it. The mechanical part will be play to him. Every day we have a short visual exercise of the following kind. A brief sentence is written on the board, and exposed to view for a few seconds; the child then writes it from memory. At first his copy of the written symbol is not at all exact, but we begin again and do it over until it is reproduced with sufficient accuracy.

How long a time must a sentence be exposed to permit the child's retention of the visual image so that he may reproduce it in writing? After repeated experiments Dr. Decroly and Mlle. Degand reached the conclusion that the sentence exposed for the shortest time is the one best retained.[1] After simi-

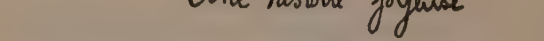
[1]Decroly and Degand, "Faits de psychologie individuelle et de psychologie experimentale," *Ecole Nationale,* 1909-10, p. 201.

Renée A.

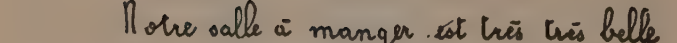



*The day she entered school*

*2 months later*

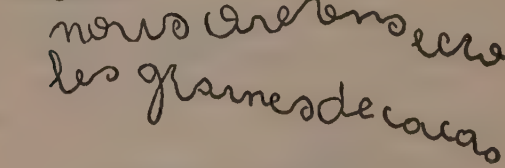



*4 months later*

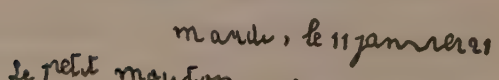



*7 months after school entrance*

Georgette M.




*2 days after she entered school*




*4 months later*

*7 months after she entered school*

lar experiments tried with three children who were deaf mutes,[1] and later with 42 normal children taught to read in my Decroly classes, I arrived at the same conclusion.

FOURTH STAGE

The children take delight in reading things they believe to be entirely new to them. For this reason we give them every day some new sentence, brief of course, relating to themselves, their lives, their interests, or possibly to their mistakes.

From six weeks to two months after the beginning of school we introduce printed characters. Our children pass without difficulty from the reading of script to the reading of print. For them the word forms a pattern, one they recognize at all times, even when presented in printed characters.

And thus we arrive at the stage of analysis and of grouping. The bright child will begin to analyze of himself, for it is a natural and necessary process. He has recourse to it spontaneously, through his discovery of resemblances between the various written word symbols. As a result of the experience here described, we may conclude:

1. That analysis develops the mental habits necessary to the acquisition of reading.
2. That the analytic process takes place every time an analogy is recognized between two or more written word symbols.

[1]Hamaïde, A., *La méthode idéo-visuelle appliqué a trois petites sourdes-muettes,* Thesis presented at examination, government course for teachers of defective children.

Thus we may assist the analytic process by bringing together the word forms offering such analogies, and presenting them to the child's attention. We do this in the following manner:

When the children can recognize the various words used in the foregoing lessons so well that they are no longer troubled with mistakes and are beginning to note resemblances of certain kinds, we help them to make up a set of placards. We commence by grouping a few words that contain a particular vowel on a separate placard, taking care to write the syllable containing the vowel in red. Up to this time all the words have been written in crayon or ink, but always in a single color. Here, for example, is a list in which the syllable containing the vowel *a* is written in red.[1]

| | | |
|---|---|---|
| *pa*pa | *ta*ble | pau*la* |
| lili*ane* | *ma*man | *la* |

The children help to make these placards. They look up suitable words in the vocabulary they have learned, and make illustrations for them as well.

| i | u |
|---|---|
| le *lit* | voi*ture* |
| pe*tite* | *ru*ban |
| *li*vre | *pru*ne |
| *li*liane | fi*gure* |
| pu*pi*tre | *rue* |
| *pi*geon | pen*dule* |
| sou*ris* | *cru*che |
| *ci*seaux | |

[1]Syllables in italics on this and the following page are those written in red on our placards.

We make up lists of this sort for all the other vowels without attempting any generalizations. The words of each list are then introduced into little stories that are read and copied by the children.

*La* petite *an*nie *a* une *a*mand sur *la ta*ble et *la pa*pa de lili*ane* une *châ*taigne sur l'*éta*gère.

When we have done this with each one of the vowels, we make up placards showing the consonants. These, too, are constructed with the children's help. At the top of each list we place a word that contains a syllable beginning with the consonant selected. We make as many placards as there are consonants and develop lists like the following by adding new words as fast as we encounter them.

| | |
|---|---|
| le *pa*pa | la *fe*nêtre |
| la *poi*re | les *faî*nes |
| la *pom*me | les *fruits* |
| la *por*te | etc. |
| les *plan*tes | |
| etc. | |

| | |
|---|---|
| la *ta*ble | la *ma*man |
| le *ta*bleau | le *mar*ron |
| l'*éta*gère | les ani*maux* |
| la châ*tai*gne | l'ar*moi*re |
| la fenê*tre* | l'a*man*de |
| etc. | etc. |

This is done with all the consonants in turn, and

the different words of each list are also used in little stories such as:

le *pa*pa de *pau*lette a une *poi*re, une *pom*me, et une *pru*ne.

When we have reached this point, we employ games in which the sentence is cut up into words and put together again at first from a copy, then from memory.

Later, we complicate the problem by presenting two sentences at a time, then three, then more, each sentence being cut up into words and put together, first with a copy, then without one.

We next begin grouping words that contain the same syllable, and the placards made at this time, about three months after the beginning of school, are almost entirely the children's own work, very little intervention being needed on the teacher's part. The words used are all familiar. They are also presented to the children grouped in stories, for example:

Une Histoire de *Pou*pée

La *pou*pée de *lou*ise a une petite *bou*che *tou*te *rou*ge et de belles *bou*cles bien *dou*ces. Elle a au*tour* du *cou,* un beau *fou*lard *rou*ge et aux pieds de beaux *sou*liers en cuir. Un *jour* la *pou*pée rencontra un *mou*ton qui mangeait un *chou—ou ou ou ou* cria la *pou*pée *vous* êtes un *gour*mand! Oh! dit le *mou*ton le *chou* est *pour* moi et je le mange.

The words containing the syllable *ou* are then picked out and written, first in the children's note-

books, then on placards. They are then illustrated by the children.

*pou*pée
*chou*
*sou*lier
*rou*ge

Histoire de Deux Petits La*pins*

Dans notre jar*din* un beau ma*tin* deux petits la*pins* causent ensemble.
—*pinpin* dit le petit frère, viens au bois il y a des petits sa*pins* et nous pourrons en*fin* manger tout ce qu'il y a de *fin.*
—Non, dit petite soeur notre clapier est si beau et les petites filles si gentilles.

ma*tin*
sa*pin*
jar*din*
la*pin*
*pinpin*
en*fin*

From this time on, whenever a child meets with a new word, he classifies it himself in the list to which it belongs.

And now the real work in analysis commences. A considerable number of words that are met with constantly are perfectly known to the children, such for example as: à, de, en, sans, dans, avec, car, quand, pour, ou, j'ai, je, il, elle, nous, vous, tu es, il est, se, les, le, la, un, une, des, mes, ses, ces, c'est,

bien, très, près, etc. We take a well-known sentence such as:

la petite *an*nie *a* une amande sur *la ta*ble et le *pa*pa de lili*ane a* une *châ*taigne sur l'*éta*gère.

Instead of cutting it up into words as has been done before, we now cut it up into syllables.

*la* — pe-ti-te — *an*-nie — *a* — une — *a*-man-de — sur — *la* — *ta*-ble — et — le — *pa*-pa — de — li-li-*a*-ne — a — une — *châ*-tai-gne — sur l'*é*-*ta*-gè-re.

The sentence is then put together with a copy, and without a copy, and the game is further complicated, by mixing two, three, and even four sentences together. This, however, adds but little to the difficulty after a child has learned to recognize the different syllables a sentence contains.

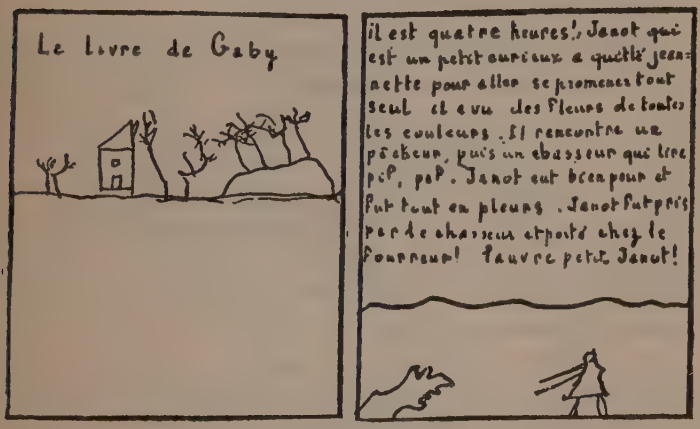
A new game is now introduced by way of recapitulation. Each child has his syllables in a little box, and after he has put his sentence together, they are mixed again, and the game begins. The teacher writes a syllable on the board saying as she does so:

Give me *pa* part of —?
Give me *li,* part of —?
Give me *une.*
Give me *a,* part of —?
Give me *man,* part of —?

The child hunts among the little slips spread before him to find its counterpart, and after finding it looks for the rest of the word to which it belongs. Suppose, for example, I have written *châ* on the board; he will say "*châ*—part of *châ*taigne."

We then look for other words containing the same syllable—for example, if the syllable *ma* is selected, we look for *ma* part of *ma*man, *ma*thilde, *ma*deleine, if *man*, part of ma*man*, a*man*de, *man*ge.

All the words on our placards are analyzed in this way, and soon when a child meets with one of the same syllables in a new word he says at once: it is the same as in —— (comparing it with the word he knows). And such comparisons are made constantly. Suppose he encounters the word *marteau* for the first time; he will say: "*mar* is the beginning of *mar*ron, *teau* is the end of rat*teau*," and he reads "*marteau*."


Le livre de Gaby
il est quatre heures! Janot qui est un petit ourceau a quitté sa jeannette pour aller se promener tout seul et a vu des fleurs de toutes les couleurs. Il rencontre un pêcheur, puis un chasseur qui tire pif, paf. Janot eut bien peur et fut tout en pleurs. Janot fut près perdre chasseur et posté chez le fourreur! Pauvre petit Janot!

GABY'S BOOK.

At this point, when the child can identify any syllable at sight as part of some word he knows, we give him his first reading book, though, to be sure,

he may be said to have had almost from the first, a reader of his own making in his observation notebook, compiled as a result of his school work and illustrated by himself. Very many children, too, have so keen an interest in reading that they make up little books for their classmates to read. The cover and a page from one such book is shown on p. 89. It is the product of undirected, self-initiated work on the part of a little girl 6½ years of age (Gaby N.).

As a first reading book my classes have used No. 1 of the series "L'Imagier de l'enfance." This little book is very well arranged and well illustrated. It presents the life of a child in relation to the different "centers of interest" studied.

In general we have found that the children's desire to read and their interest in reading are so great and they attack sight-reading with so much delight and enthusiasm, that the first difficulties are quickly conquered. Moreover, they read with expression, and without having to go through the painful stage of syllabification. They understand what they are reading, for each word is significant to the reader.

After six months' work in reading my children of the first preparatory year could read the second book of the series "L'Imagier de l'enfance," and if asked any word appearing in the first book, would pick it out immediately among the fourteen stories it contains.

And so the time arrives when the children are

able to read any book at all within their powers of comprehension, with the greatest pleasure, and without discouragement over any difficulties it may offer.

Moreover, we must not forget that it is not the pupil only who benefits by this kind of teaching. The teacher is afforded so much satisfaction and comes to feel so great an enthusiasm in work of this kind, that the task even of teaching reading becomes agreeable and interesting.

*Spelling*—Spelling is acquired incidentally, especially if the language used is French. In all the Decroly classes the results obtained even in the first year have been surprising. Here are some specimens of written dictation and original composition work done in my first-year classes.

*La chambre à coucher*

(Free work in composition by a child 6½ years of age after 7 months in the Decroly class. Uncorrected.)

Nous avons fini notre chambre à coucher elle est très très jolie il y a des chaises une table. It y a 3 lits un pour papa et maman un pour la petite fille et un tout petit pour le bébé. C'est très très joli nous allons faire la cuisine et la cave c'est très très gai.[1]

*Une triste journée*

(Dictation—after seven months)

Ce matin nous arrivons très content à l'école.

[1]Tr.—We have finished our bedroom it is very pretty it has chairs and a table. There are 3 beds one for papa and mama, one for the little girl and one very little one for the baby. It is very, very pretty we are going to make the kitchen and the cellar it will be very, very nice.

Mais une triste nouvelle nous attendait. Un petit lapin bleu est très très malade. Une de nos petites souris s'est enfuie! Comme c'est triste!

Of twenty-two children, seven made no mistakes in the above dictation, six made 1 mistake, two made 2 mistakes, three made 3 mistakes, four made 4 mistakes: Average, 1.6 mistakes.

After seven months of work, exercises of this kind are varied and frequent. We make up stories using all the words we know and write them on the blackboard. For example:

*Evelyn*

Evelyn se lève le matin. Elle se lave. Elle s'habille, met son corsage, son pantalon, son jupon et sa robe. Evelyn déjeune et part pour l'école.

*Janot et Jeannette*

Nous avons à l'école deux beaux lapins, Janot et Jeannette. Ils sont dans un beau clapier peint en vert. Nous les aimons beaucoup et nous leur donnons tous les jours des choux, des pelures, des carottes à manger.

# THE SOCIAL VIEWPOINT

*. . . experiencing of an idea provokes corresponding action. It is through appeal to action and to the intellect combined, that we may so transform the instincts as to permit the child's attainment of his highest development.*

—Ovide Decroly, "Comment l'Éducation intellectuelle contribue à sublimer les tendances," in *Pour l'Ère Nouvelle*, Oct., 1923.

## CHAPTER VII

### THE SOCIAL VIEWPOINT

If a child's experiences at school are to contribute effectively to the development of social attitudes and sentiments, he must be personally enlisted, actively, intellectually, affectively, in the school's success as a community, a community whose organization he can understand and whose best interests he can work to assure. The habits he acquires in the classroom should lend themselves to the building up of this kind of morale.

Such a conception of the school's social purpose is well exemplified in Dr. Decroly's program. It is with such an end in view that he introduces activities affording the practical and social situations of everyday life. The school is made a real community in miniature, where the pupils work together and aid each other, where discipline becomes what Ferrière would have it, "a thing appropriate to its end," the outgrowth of work undertaken in common. The varied manual occupations engaged in introduce an atmosphere of reality into this community life. The child is led to construct and to produce, rather than to drink in information and receive instruction; and this fact exerts an important influence on his powers of judgment and of comprehension. He performs his individual work, con-

tributes to the common task, and participates in the accomplishments of his group. He does not have placed before him a purely individualistic ideal of accomplishment, and there is no need for recourse to outside stimuli, such as rewards.

Thus the Decroly program aims at something beyond "storing the mind." It undertakes to orient the child in regard to that social life in which he has his part to play. As we have seen, he is made aware that he is a living being, an organism with needs to be met, placed in the midst of a social environment—the family, the school, the state—which he must learn to know at first hand, and in relation to time and space. To this end he needs to consider Nature in its three aspects—animal, vegetable, mineral; he must acquaint himself with raw materials, with their conversion into manufactured goods, and finally with their transportation to localities where they can be used. Thus, the cycle of human activities is presented to him.

But something more is needed if we would raise the child to man's estate. We must develop his initiative, his self-reliance. How may the school accomplish this? By organizing itself into a little community within which, so far as the characteristics and capacities of the children permit, all social functions shall be entrusted to them—a community in which the children's activities shall be the outcome of their freedom. For it is by learning to act on their own initiative, not by quiescence, that children prepare themselves for the demands of life.

Recognizing this, we do not check their spontaneous activity, nor do we impose on them action in accordance with our own desires. Discipline for our children is the outcome of their activities, of their work, of their own necessities. It is not associated with immobility, passivity, and obedience.

The children themselves are responsible for the discipline of the schoolroom. In my class at Elementary School C., for example, the girls would enter the school building each morning without surveillance, take off their wraps, go to the classroom, and set themselves to work promptly and without confusion. Did some begin to talk, others at once demanded quiet and the chatterers obeyed. If for any reason I was not prompt, someone would undertake to fill my place. Sometimes several would volunteer as teachers. In that case a short discussion decided the matter and the lesson would begin. These young instructresses conducted lessons in a charming fashion, and their little community listened to them with interest and attention.

The various responsibilities of the class are apportioned among its members by the children themselves. One is placed in charge of neatness in the schoolroom; another looks out for the order of the coat room; others for the cleaning of the blackboards, ventilation of the room, keeping of the calendar, keeping watch of the time, the arrangement of the closet, of the tables and cabinets containing the collections, of feeding the animals, watering the plants, maintaining quiet. Each responsi-

bility is held as long as the pupil desires to hold it and discharges it conscientiously.

And how clearly the personality of a child displays itself by the manner in which such duties are discharged! One can discern at once the organizers, the workers, the conscientious, the persevering. There are some who faithfully perform their duties; others who forget, or leave the work to their companions. But in general they acquit themselves well of their responsibilities and are proud to be entrusted with them.

We strive to educate conscience by calling attention to whatever of good or ill may have characterized the day's events in the class. Thus we introduce the children to many of life's problems by means of facts they have observed for themselves, and these are supplemented by carefully chosen stories.

As a general thing we end the day by the reading of some story. The children as they listen give evidence of their sentiments—admiration, delight, disapproval, pity. Often they express themselves aloud. In their hearts and in their heads are germinating the precious seeds of the great human ideals.

Good marks and bad marks are banished from our classes. A child who has misbehaved acknowledges his fault and tries not to repeat it. Comparisons are never made between a child and his fellows. He is compared only with himself, with his own record, which he is constantly striving to improve.

The children have physical freedom. In order to make the best possible disposal of the conventional

Fig. 4.—Caring for the animal pets affords many incidental observations.

equipment provided us in Elementary School C., we placed the forms in a horseshoe formation instead of one behind the other. This arrangement permits the child to move about more freely, and the teacher can more easily supervise the little ones. It offers too, a great advantage from the standpoint of health, since it lessens physical contacts and thus diminishes dangers from infections. (*See* Fig. 1.)

We have given up school reports of the usual kind. In place of them we use one giving a careful and fairly complete analysis of the child's psychological status. The response we have met with from the parents goes to show that this type of report interests them keenly. It has a marked effect, too, in making both parents and teachers observe the children more carefully.[1] Its use has been followed by the establishment of closer relations between the school and the home.[2] It has been adopted by the city system of Brussels and is now in actual use in those elementary schools where Decroly classes have been undertaken.

A reproduction of one of these reports is included here.

Certain provisions designed to develop a spirit of solidarity are discussed in the chapter describing the demonstration at Elementary School C; such are

[1]The teachers who have been called on to make reports of this kind have incidentally gathered many records of very considerable interest and value.

[2]Among other methods used for the same end have been the visits paid by parents to the school. At the beginning of each year those parents who do not yet thoroughly understand the ideals of the Decroly school, and the methods employed, are invited to be present and to assist for three whole days in the activities of the class room. Many have availed themselves of such invitations.

CITY OF BRUSSELS

DEPARTMENT OF EDUCATION

Dec. 15, 1920.

*Sir:*

*We are sending you herewith the quarterly report of* Annie.

*Respectfully yours,*

THE PRINCIPAL.

[Form of report adopted for use in the Decroly classes, Page 1.]

| | |
|---|---|
| PHYSICAL CONDITION: | Appears to be good. |
| Gymnastics: | Very awkward. Has great difficulty in executing directions given. |
| Games: | Shows fear and hesitation. |
| MENTAL DEVELOPMENT: | Annie is a child of good mental ability. Her motor co-ordination, however, is markedly poor. She shows excellent powers of comprehension. Observes well. Her imagination appears to be somewhat overdeveloped. She shows much individuality and a good deal of poise, knows always exactly what she wants. |
| Observation: | Very good work. Shows originality in making observations, and in discussing them. Her language is delightfully original. She is always keenly interested in what is going on in class. |
| Measurement: | Very good work. |
| Mechanics of number: | Very good. |
| Problems: | Very good. |

| | |
|---|---|
| Oral Expression: | Expresses herself with great facility and in a wholly original and individual manner. |
| Conferences | Very good work. Can talk with ease on any subject suggested. States her views slowly, carefully and without embarrassment. Takes much pleasure in work of this kind. |
| Spelling: | Very good work. |
| Reading: | Very good work. Annie has an excellent visual memory. She generalizes[1] already, and reads very rapidly. Is very much interested in learning to read and anxious to read from a book. |
| Concrete Expression: | At first experienced unusual difficulty in written expression, but soon overcame this. |
| Handwriting: | Her progress is hardly believable. |
| Modeling: | Her work shows characteristic originality. |
| Cutting Out: | Very awkward. Needs practice in this. |
| Drawing: | Loves to draw. Very individual and original work. |



[1] *See* Chapter VI, "Reading," p. 70.

SOCIAL AND ETHICAL DEVELOPMENT:

| | |
|---|---|
| Deportment: | Annie is a delightful child. |
| In Class: | Responsive, open-hearted, very enthusiastic when she succeeds at her work. Makes a constant effort to please me. |
| At Play: | Plays very quietly. Chooses the smallest and gentlest children as her companions. |
| Attitude toward her fellows: | Very reserved. Does not make friends. Lives her own little life. |
| Attitude toward her teachers: | Annie is always very polite, affectionate, engaging. Always desirous of doing well. She deserves only praise. |

NUMBER OF DAYS ABSENT: 15

NUMBER OF TIMES LATE: 12

Signature of the Teacher ..... Signature of the Principal .....

Remarks:

(This space to be filled by the parents before returning the report to the Principal.)

the children's co-operative projects, the tradition of mutual assistance, the class collections made as a result of common interests and efforts, our indexes of reference materials, and the manual constructions undertaken.

The school plan we have been considering in these pages is based on a very thorough understanding of children. In spite of that fact it has not escaped numerous criticisms. In the past these have been made largely by parents with children of limited ability, who have tried to hold the Decroly school responsible for the failure of such children to make satisfactory progress. Or, what is more serious, the critics have been people who have judged and condemned the school without having once entered it. "A child from the Decroly School," so the saying ran, "never knows how to read, write, or figure." We must, indeed, admit that a child from the Decroly School has acquired knowledge of a different kind; that he has been developed mentally, that he exhibits judgment, reasoning power, initiative, individuality; that he is active, busy, loves his work. But what shall all these profit if he has not reading, writing, number—"the three great R's"?

Happily, as the reader will discover in the following chapter, experience has proved that in addition to the advantages generally conceded for it, the Decroly plan, carried out as it was originally conceived, may lay claim to better results in reading, writing, and number, than those obtained by the usual methods of the conventional school.

# A DEMONSTRATION

*. . . we have recommended and experimented with the following measures:*

(a) *Taking as the pivotal matter of instruction those things that are related to the needs and tendencies that are essential, permanent, common to all children. . . .*

(b) *Placing the children in an environment such that the materials, the objects, the facts natural and living and, approximately, appropriate to the tastes of their age, without preconceived limitations may suggest and permit of occupations and awaken latent interests that are desirable.*

(c) *Organizing the environment, the activities, the influences of imitation in a way to develop the most important habits, notably habits of working joyfully and collectively. It has been with this intention that work has been treated on the same plane as the essential needs, and as a natural consequence of these. . . .*

*If it is understood that habits may become as strong as are the instincts, it will be recognized that there is educational advantage in creating among them the habit of work; it should be understood moreover, that a habit will be developed so much the more easily if it is grafted on an instinct. Thus it will result that the habit of work will be developed so much the more easily if we can associate it from the beginning with the satisfaction of those instincts that are the most essential, the most general, the most permanent.*

—Ovide Decroly, *Les Intérêts de l'Enfant et le Programme de l'école primaire.*

## CHAPTER VIII

### A DEMONSTRATION

*History of the Class.*—It was in October, 1916, that I began my work at Elementary School C., in the rue de Gravelines, Brussels. Thanks to Mlle. L. Carter, my principal, who fully understood the purposes of the Decroly School, and was in sympathy with them, I was enabled to make a demonstration of the methods in which I had come so thoroughly to believe, and to follow the ideals that had inspired me in the rue de l'Ermitage.

My class, at the beginning, was in the first year preparatory grade.[1] The children, nearly all of them, came from well-to-do middle-class homes but were not a specially selected group. As a matter of fact, all who enrolled were accepted. There were 20 the first year. In the year following I had 14 new pupils, and in the third year 17 more came to join us, making a total of 47 in the class.[2] But so large a number was not to the advantage either of the children or of the demonstration, and in the fourth year the class was divided. Of the 24 children who remained with me, all had been enrolled during the first or second year.[3]

---

[1] In the schools of the United States the first grade or first form.

[2] The Armistice brought back to Belgium a great number of children who had passed the years of the War abroad.

[3] Four pupils left the class as shown by Table I (p. 108): three because of illness, one because her father disapproved of our methods.

Careful psychological examinations were given all the children, both the Binet and Decroly tests being used. The results obtained at the end of the second and of the fourth year are shown in Table I. They indicate the type of pupil composing the class.

TABLE I

Comparison of chronological and mental age, pupils of the Decroly Class, Elementary School C.

| | *Second Year* | | *Fourth Year* | |
|---|---|---|---|---|
| *Name* | *Chron. Age* | *Mental Age* | *Chron. Age* | *Mental Age* |
| Loulou W. | 6- 5 | +2 | 9- 8 | +1½ |
| Léa M. | 7- 1 | +2 | 10- 2 | +2 |
| Denise H. | 7- 1 | +1 | 10- 3 | +1 |
| Yvonne K. | 7- 2 | +2 | 10- 3 | left |
| Claire G. | 7- 2 | +1 | 10- 3 | +1 |
| Lucie C. | 7- 2 | —1 | 10- 5 | +1 |
| Aimée R. | 7- 4 | 0 | 10- 6 | +1 |
| Suzanne D. | 7- 5 | +1 | 10- 7 | +1 |
| Lili Du | 7- 6 | 0 | 10- 9 | 0 |
| Simone S. | 7- 8 | not tested | 10-10 | left |
| Augusta L. | 7- 9 | +2 | 10-11 | +3 |
| Madeleine S. | 7-10 | +2 | 11 | +3 |
| Louise V. | 7-11 | +1 | 11- 1 | +1 |
| Andrée F. | 8- 1 | +1 | 11- 2 | 0 |
| Lucienne S. | 8- 2 | +2 | 11- 3 | +2 |
| Mariette R. | 8- 2 | +2 | 11- 3 | +1 |
| Elly P. | 8- 2 | 0 | 11- 3 | —1 |
| Helen V. de B. | 8- 3 | +2 | 11- 4 | +3 |
| Berthe Ch. | 8- 3 | 0 | 11- 4 | left |
| Elise B. | 8- 3 | 0 | 11- 4 | left |
| Suzanne S. | 8- 3 | 0 | 11- 4 | +1 |
| Loulou S. | 8- 5 | 0 | 11- 6 | 0 |
| Lili D. | 8- 6 | 0 | 11- 7 | —1 |
| Yvonne V. M. | 9-10 | —3 | 13 | —3 |

In order to show *how* these children worked in their fourth year at school, as well as the *amount* of work that they accomplished, let us consider:

I. The organization of subject matter: (a) Development of subject matter programs by the children; (b) Recapitulation by graphic methods.
II. The class conferences and discussions: (a) Exposition by individual children; (b) Criticism by the class.
III. Work in composition, spelling, vocabulary, number.
IV. Decoration of the classroom.
V. Individual achievement—records of three children.[1]

*Organization of Subject Matter by the Children—*

Under the Decroly plan children in the fourth year of school develop their own subject-matter programs. After a few minutes of reflection they offer their ideas in regard to the different topics that they think should be discussed in connection with a given center of interest. As they have been accustomed from the first to an organization of their school work under the three headings, Observation, Association, and Expression, they make use of this classification in proposing topics. This is done entirely of their own accord, and without difficulty.

The following is one of these subject-matter programs as developed by the entire class in collaboration, the center of interest under consideration being

[1] *See* Chapter IX.

*Plants.* The outline was written at the children's dictation without suggestions from the teacher. The time taken was not more than half an hour.

PLANTS

OBSERVATION

6. Wild plants.
2. Pot-herbs.
3. Uses of plants.
4. The food of plants.
5. Cultivated plants.
1. Different parts of a plant.
7. Plants used for fodder.
8. Plants used for medicine.
9. Extracts made from plants.
10. Textile plants.
11. Aquatic plants.
12. Plants in the Botanic Gardens.
13. The different kinds of roots.
14. Flowers and the families to which they belong.
15. Carnivorous plants.
16. The different kinds of leaves.
17. Food plants.
18. The color of plants.
19. Some curious plants.
20. Mushrooms.
21. Parasitic plants.
22. Noxious plants.
23. Germination of seeds.
24. The fruits and flowers of each season.
25. Fertilization of plants.

26. How plants are useful to birds and how birds are useful to plants.

ASSOCIATION

1. Plants that grow in foreign lands.
2. Food plants of foreign lands.
3. Plant life throughout the ages.
4. The primeval forest and its plants.
5. The different products of the cocoanut.
6. Ardenne and its forests.
7. Sacred plants of the ancients.
8. The cactus plants of Mexico.
9. Use of cultivated plants the world over.
10. The wonderful flowers of Japan.
11. The Japanese schools for flower-girls.
12. Plants of the Alps.
13. The Belgian provinces and their plants.
14. Holland, her tulips and hyacinths.
15. Plants of cold countries.
16. Plants of hot countries.
17. Plants that grow in the sand dunes.
18. Seaweeds.
19. Plants of the Arctic and Antarctic regions.
20. Orchids of the virgin forest.
21. Foreign fruits and their uses.
22. Plants of the equatorial regions.
23. Plants of the temperate zones.
24. How perfumes are extracted from flowers.

EXPRESSION

1. Find words belonging to the word-families *plant, flower, leaf,* etc.

2. Synonyms for the word *plant*.

The following were suggested as subjects for original themes:

3. Dialogue between a flower and a plant.
4. Every season has its plants.
5. Flowers used as emblems.
6. The history of a plant.
7. Draw the different parts of a plant and describe them.
8. The story of a flower girl and her violets.
9. The story of a wood anemone.
10. The story of a chaffinch and his nest.
11. The story of a sacred plant.
12. Dialogue between Osiris and the lotus.
13. Dialogue between the root and the sap.
14. Dispute between an apple tree and its tuft of mistletoe.
15. Telling time by the flowers in my garden.
16. A conversation between the drosera and its victim, the fly.
17. Dialogue between the mistletoe and the thrush.
18. Conversation between the lotus flower and an Egyptian.
19. Dialogue between the druid's golden sickle and the mistletoe.
20. The gall-fly, a parasite of the oak tree.
21. Original theme on the eucalyptus.
22. Talk between a tadpole and an acquatic plant.
23. Drawing. Fruit, flower and leaf designs.
24. Modeling. Make a flower in clay.

25. Flora of the Congo in clay.

*Topics for Conferences*

1. Flower festivals of historic times.
2. When do flowers go to bed?
3. Different seasons for flowers, for fruits.
4. Small flowers and large ones.
5. Perfumes extracted from flowers.
6. Flower festivals of the Spring in different countries.
7. The different chrysanthemums of Japan.
8. How glue is gathered from trees.
9. How plants are propagated.
10. How the Negroes gather rubber from the trees.
11. Plants of Japan.
12. Gums that come from various trees.
13. The properties of different roots.
14. How oil is extracted from palm trees.
15. Medicines that come from plants.
16. Poisonous plants.
17. Looking for wild fruits in the jungle.
18. The Brussels flower festival, the "Longchamps Fleuri."
19. Plants of the North Pole.
20. Growing cork.
21. What things are made of rubber?
22. How oil is extracted from plants.
23. Some curious roots.

After their suggestions for topics of study have been listed, the next step is to gather suitable reference materials. The children look up at home what-

ever appropriate references they can find.[1] These are brought to school and examined, some studied, others merely looked over. At the same time pictures and other illustrative materials are sought. These are labeled with cards explaining their chief features of interest. It then becomes necessary to organize these raw materials into a related program. This is accomplished by using Dr. Decroly's outline for the preparation of lessons.[2] Under the leadership of the teacher necessary suggestions are supplied to make evident any discrepancies or gaps in the children's knowledge of a subject, and to facilitate their recognition of any general ideas that may be developed.

*Recapitulation by Graphic Methods—*

When we have completed any portion of the program—that is to say, after one, two, or three months, according to the importance of the topic considered, and before passing on to another, we review the ground covered. For that matter, review may be said to be a daily affair with us, since the children take so much pleasure in looking over their note-books, and are thus constantly recalling past lessons. But at the end of any program dealing with a given center of interest, or, in the case of a

[1] In order to carry out this part of her experiment at Elementary School C, Mlle. Hamaïde placed her own library at the disposal of those children whose homes were inadequately supplied with books. In this way they were enabled to do the same kind of work as their more fortunate companions. The importance of a good school library to work of this kind will be apparent.—Ed.

[2] *See* Chapter X, "Outline for the Preparation of Lessons and Teacher's Notes" pp. 220 to 229. Also Chapter III, p. 30.

"single center program"[1] at the end of any of its chief sub-divisions, the class reviews the work done by making a series of charts. An idea of these can be gained from the cuts shown (Figs. 7, 11, 12).

Teacher and children together decide as to the subjects chosen for these review charts. For example, after finishing our study of *Clothing* we decided to make seven different charts, one each on linen (*see* Fig. 12) wool, cotton, hemp, silk, and two on fur, one showing the fur-bearing animals, the other, different kinds of fur.

After the subjects for the charts have been determined, the children themselves do the rest. As a rule no assistance from the teacher is necessary. Leaders are selected, one for each chart, chosen from among those individuals whom their classmates recognize as having the most initiative, or as being the best informed.

The leaders choose their assistants, or the members of the class group themselves according to the leaders of their choice, and the various portions of the work are assigned. Thus, when our charts on clothing were to be prepared, one child in each group was made responsible for the raw materials, another had to be ready with information and illustrations concerning the necessary utensils and machinery used in manufacturing, others must be informed about the different kinds of fabrics made from the raw material, and still others were set to work making specimen articles of clothing, etc., out

[1] *See* p. 25.

of the various materials considered. One evening at home is given up to preparation of this kind, and the following afternoon is devoted to getting up the chart.

Then the classroom becomes a veritable beehive, everyone is so busy and gay. The groups get together. The leaders supervise and organize the work. The materials brought by members of a group are assembled, classified, selected. The various possibilities of arrangement are discussed, and one is finally agreed on. Each member of the group is enabled to contribute personally to the finished product, and much good taste is displayed.

Collective work of this kind furnishes most valuable experience. It facilitates and develops a spirit of mutual helpfulness. Often the children of one group, looking for materials to use for their own chart, will call the attention of another group to something they have found that might be of use to them.

An afternoon generally suffices for the creation of any one series of such charts. They are then tacked to lathes, and hung by the children on the schoolroom wall.

But our use of charts is not limited to purposes of review. Making them became such a matter of interest to my girls at Elementary School C., that, during our fourth year, they had always a chart of some kind in process of making. These were kept on a table at one end of the schoolroom. The subjects were generally drawn from one or another of

our daily experiences in observation. The chart reproduced in Fig. 13 shows the development of a bean plant measured by us from day to day. The drawings were first made by the girls in their note-books on a scale of 1:10. The chart represents the work of the twenty-three children in the class. Yet an examination of it gives no indication of the fact that so many individuals were concerned in its making. At the end of the year twenty-six big charts decorated the walls of our classroom. The children had unanimously voted to replace all the charts and pictures furnished by the school with these products of their own collective manufacture. When school closed they were divided among the class members. Later they were loaned to me that I might have them photographed.

*Class Conferences and Discussions—*

I will let one of the children describe our class conferences. A. L. in her journal kept during the third year wrote as follows:

*Les Conférences*

"Vous ne savez peut-être pas ce que j'entends par conférences. Je vais vous le dire: c'est une petite causerie, avec sujet au choix que font les élèves de ma class. Il y en a qui débitent leur conférence d'un seul trait somme si elles étaient pressées d'avoir fini; d'autres hésitent et bredouillent d'autres encore la disent avec clarté et sans broncher. On voit tout de suite, à la figure des enfants, celles qui aiment de conférencier. Celles qui ne l'aiment pas vont à l'estrade comme si elles allaient au supplice, elles

sont timides et embarrassées. Elles parlent très bas, au font de la classe, on ne les entend même pas; on ne voit que bouger leurs lèvres. Celles qui l'aiment au contraire, sont heureuses de pouvoir dire cette conférence, dont elles n'ont pas osé laisser échapper le titre, de peur de ne plus causer de surprise.

Le jour des conférences est un véritable fête pour nour, fête surtout, pour celles qui écoutent.[1]

Beginning with the first year of school, we have one of these conferences every week. The children are free to choose their own subjects, but as far as possible we try to keep them related to the center of interest the class may be studying at the time. In the fourth year the children's talks become much more ambitious, but they are not called on to give one oftener than once in three weeks. It has been a matter of interest to find that very many of them will be "working up their subject" during the whole interval, thinking about it from day to day, and

[1]The difficulties of making a fair presentation of the children's work in composition through the medium of a translation will be evident. It has seemed best to retain the original French and to supplement by a free rendering in English designed to give content rather than form.—Ed.

*Our Conferences*

"Perhaps you do not know what I mean by a conference. I will tell you; It is a little talk about something special by the girls in my class. Some of them say it all at a stretch, as if they were in a hurry to get through, others stop and stammer and others speak clearly without making mistakes. You can tell right away by their faces the ones that like conferences. The ones that don't like them go up on the platform as if they were going to be punished, they are afraid and embarrassed. They speak very low, at the back of the room you can't even hear them; you just see their lips move. Those that like them on the contrary, are delighted to be able to talk at a conference and they haven't dared let anybody know beforehand what the subject is going to be, for fear they won't surprise people.

Conference day is great fun especially for the ones that listen.

gathering facts of interest in regard to it from one source and another. In this way they develop a valuable working method, and become accustomed to making fairly lengthy expositions.

The talks are often very interesting. They complete our lessons in observation, and even replace them at times. As the children have been accustomed to the use of illustrative material from the very first of their school experience, they make use of it as a matter of course when giving their talks. Some of them make veritable little lecturers, setting forth their subject matter methodically and intelligently. The conferences listened to are summarized in special note-books, with the aid of sketches or references. Sometimes they are recorded in the note-books of observation, if they relate directly to the center of interest under consideration.

The talks are generally followed by criticism, but this is never unkind. The children begin always by declaring that the talk has been interesting; then, aided by the notes they may have taken, they question the speaker, asking for supplementary information or explanations.

It is hardly necessary, I am sure, to dwell on the desirable effect of these talks on a child's vocabulary, and above all on his ability to express himself.

Here is a list of the subjects chosen by a single child during the last three years of the class. No list of the first-year subjects was available since the children do not use note-books in connection with their conferences until the second year.

Second Year—1917-18

| | | |
|---|---|---|
| The hippopotamus | 1 day | 12 mo. |
| Avalanches | 9 | 1 |
| Sugar | 2 | 3 |
| Bananas | 4 | 4 |
| If you wish for good digestion. | 11 | 5 |
| The mammoth | 5 | 6 |
| The potato | 22 | 6 |

Third Year—1918-19

| | | |
|---|---|---|
| Milk, the slayer of babies | 12 | 10 |
| Swans | 9 | 11 |
| The salt mines of Wieliczka | 14 | 12 |
| In China | 8 | 1 |
| Gingerbread | 15 | 2 |
| Pompeii | 22 | 3 |
| Prehistoric man (given at the museum) | 3 | 4 |
| The hidden beauties of nature | 3 | 5 |
| Some birds of the Arctic and Antarctic seas | 4 | 6 |

Fourth Year—1919-20

| | | |
|---|---|---|
| Furs | 15 | 10 |
| The tree dwellings of the Papuans | 15 | 11 |
| The cultivation of market gardens | 6 | 12 |
| Moths and clothing | 8 | 1 |
| How the Japanese live and dress | 9 | 2 |
| Silk | 5 | 3 |
| The leather trade | 30 | 3 |
| Plants | 10 | 4 |
| The cactus plant | 9 | 5 |
| The cabbage | 10 | 6 |
| When it is noon at Paris | 15 | 7 |

*Composition, Spelling, Number, Vocabulary—*

Much free work in composition is done by the children. As in the class conferences, the subjects are of their own choosing, but in most cases bear some relation to the center of interest studied at the time. Composition writing begins in the first year of school. The following examples are by the same child representing her work in the first, second, third, and fourth year. They reflect a complete evolution. The original spelling has been kept.

*Le tétard*—8/6/1917

Age 7 yrs. Time 5 min.

Le tétard est une bête qui vi dans l'eau. Le tétard a une queue pointue, il a aussi 4 pattes 2 devant et 2 derrière. Sette bête mange des plantes.[1]

*Ma classe en ce moment*—16/4/1918

Age 7 yrs., 10 mo. Time 20 min.

Dans ma classe il y a des fleurs, toute l'étagère en est garnie. J'aime bien l'étagère pour cela. Il y a aussi une table avec des pierres et des acquariums avec des grenouilles, des tritons et des oeufs de grenouilles. Des petites asiettes. Et sur la table de mademoiselle il y a une huître perlière. De tout les côté du mur il y a des dessins et des tableaux de toute sortes.

Il y a aussi un tableau, une armoire, des flacons, dans l'un il n'y a que de l'eau, dans l'autre un orvet.

---

[1] *The Tadpole.*—The tadpole is an animal that lives in water. The tadpole has a pointed tail, he has 4 feet 2 in front and 2 behind. He eats plants.

Léa a apporté un tableaux de fruits que nous avons suspendu dans notre classe. Enfin nous l'aimons bien parce qu'elle est si jolie.[1]

*Une nouvelle élève*—5/6/1919

Age 9 yrs. Time 25 min.

Ce matin, à notre grande surprise, une petite fille de honze ans est venue se présenter à Mlle. Elle se nomme Félicie, je ne connais pas son autre nom. Comme elle devait être étonnée et impressionnée de voir cette classe qui s'ouvrait toute grande devant elle. Tout était nouveau pour elle, la demoiselle, ses nouvelles petites amies, les acquariums, les terrariums qu'habite un monde nouveau pour elle, peut-être! Les dessins qui pendent au mur, les fleurs, les cartes géographiques, les boîtes à collections, l'étalage de minéraux et de dents d'animaux. Tout cela doit l'avoir bien étonné, d'ailleur sa mine nous le prouvait bien![2].

*Notre promenade*—15/5/1920

Age 10 yrs. Extract from her day book.

---

[1] *My Schoolroom Today.*—My schoolroom has flowers in it, all the shelves are full of them. That is why I like the shelves. There is a table with stones too and acquariums with frogs and tritons and frogs' eggs. Some little plates. And on Mademoiselle's table there is a pearl oyster. All the walls have pictures on them and all kinds of charts.

There is also a blackboard, a closet, some bottles, in one there is only water, in one there is slow worm.

Lea brought a picture of fruit and we hung it on the wall. We love our schoolroom very much because it is so pretty.

[2] *The New Girl.*—This morning to our great surprise a little girl eleven years old came into our class. She gave Mlle. her name. She is called Félicie, I do not know her other name. How surprised she was and impressed when she saw our big class in front of her! Everything was new to her, the teacher, the girls in the class, the acquariums, the terrariums full of live things entirely new to her perhaps! The drawings that hang on the wall, the flowers, the maps, the boxes with our collections, the specimens of minerals and animals' teeth. All those things must have astonished her, and she acted as if they did!

Hier après-midi nous avons été mesurer la distance entre les arbres de la seconde partie du Cinquantenaire.

Lorsque nous eûmes compté 25 arbres alignés dans la grande allée et que nous eûmes pris note de leur distance au moyen de la chaîne d'arpenteur, comme des géomètres, nous décidames de faire un tour au musée égyptien. Rien de plus extra-ordinaire que ce musée! Les reliefs des tombeaux représentent des scènes de la vie d'autrefois; les hommes y ont de si drôles de poses qu'on aurait envie d'en rire, leur singulière écriture sont des hiéroglyphis que Champollion a su déchiffrer le tout premier, les curieux sarcophages avec leurs momies embaumées et toutes entourées de bandelettes font songer à l'étrange croyance de ce peuple, qui s'imaginait qu'au bout de trois mille ans leur corps renaîtrait à la vie. C'est pourquoi ils prenaient tant de soin de leurs cadavres, ils les enfermaient dans des sarcophages peints, au milieu d'objets familiers dont ils avaient le plus besoin. Ils n'ont pour sur jamais pensé qu'ils seraient un jour exposés dans un musée et qu'une troupe d'enfants se seraient intéressés à eux.[1]

[1]*Our Walk.*—Yesterday afternoon we measured the distance between the trees in the second part of the Cinquantenaire.*

After we had counted a row of twenty-five trees in the main drive and found their distances with a chain the way surveyors do, we decided to pay a visit to the Egyptian museum. Nothing could be stranger than this museum. The reliefs on the tombs have scenes from the life of ancient days; the men are in such funny positions you want to laugh, the curious writings on them are all in the hieroglyphics that Champollion was the very first to learn to read, the curious sarcophagi with their mummies embalmed and all wound up in little bands remind you of the strange belief of those people, who thought that at the end of three thousand years their bodies would come back to life. That is why they took such good care of dead people, they shut them up in the painted sarcophagi, with all sorts of useful things they thought they would have the most need of. They surely never thought that one day they would be shown in a museum, and that a lot of children would be interested in them.

*The Cinquantenaire is a park in Brussels.

Children always enjoy this free work in composition. At the end of the fourth year my class collected the stories they had written and made a book of them. They chose as a title *Pour les petits . . . par les petits*—"For the Children, by the Children." The book has a dedication and three prefaces. It contains 110 selections and a table of contents, and is divided into four parts corresponding to the four centers of interest studied during the year—fruits, food, clothing, and plants. All the children contributed to it and it is a good example of both individual and group work in combination. There are some real little masterpieces in it. All the writing was done in school, on the children's own initiative and without assistance of any kind from the teacher; only the spelling was corrected. The children illustrated it and in its completed form it really makes an excellent book of selections for the use of younger children. The two prefaces that follow give the history of the undertaking.

*Pour les petits . . . par les petits*

*Preface II*

Que nous sommes heureuses de pouvoir offrir à nos parents le joli recueil de travaux spontanés faits par nos petites compagnes, les élèves de la quatrième année préparatoire A. Depuis le premier jour que nous avons vu l'école, cette chère petite école, pleine de soleil et de verdure, nous avons vécu au milieu de tous les êtres vivants de la nature et nous les avons aimés et protégés de toutes nos forces. Aussi sommes-nous bien reconnaisante à Mademoiselle qui

nous a fait aimer cette si intéressante et amusante méthode de M. Decroly, à Mlle. la Directrice qui nous a permis de transformer notre classe en un musée joyeux et vivant où nous retrouvons tous les êtres que nous avons appris à connaître et à admirer durant nos quatre premières années d'études. C'est eux que toutes nos petites compagnes ont chantés dans les petites rédactions qui forment ce recueil. Quand nous serons de grandes filles, que nous aurons quitté les jeux bruyants, nous aimerons à dénicher dans la bibliothèque les petits travaux d'autrefois et comme nous serons heureuses de les relire et de revivre ces joyeuses années en compagnie de notre première institutrice.[1]

Loulou W., 9½ yrs.

*Preface III*

Dans une classe, sur un pupitre je naquis! Avec quel travail des fillettes me fabriquèrent! Avec quelle joie virent-elles leur oeuvre réalisée! Avec quelle joie, elles recopièrent ces travaux spontanés dont je suis l'enfant dans un beau livre avec de belles illustrations. Avec quelle émotion elles appri-

[1] *For the Children—By the Children: Preface II.*—We are very happy to be able to offer to our parents this fine collection of original stories written by our little friends, the pupils of Fourth Year Preparatory A. Since the day we first saw our school, this dear little school, full of green growing things, we have lived in the midst of all the living creatures of nature, and we have loved them and taken care of them with all our might. We are very grateful too, to Mademoiselle who has made us like that interesting funny method of M. Decroly's, and to Mlle. the Principal who gave us permission to make our classroom into a lovely, real museum where we can have all the live things we have learned to know and be interested in, in our first four years of school. This is what all our little friends have been saying in their stories that were made into this book. When we have grown to be big girls and have stopped our noisy play, we will be glad to take these stories of old times down from the library shelf, and how much we will like to read them again, and live over again these happy years with our first teacher.

rent qu'ils seraient tapés à la machine. Avec quelle joie enfin, quand toutes ces merveilles furent tapées, elles les illustrèrent avec soin et intercalèrent les illustrations avec des doigts de fées!

Alors, elles relièrent le tout . . . je fus fait!

Maintenant, je vais vous dire, où est cette classe de petits écrivains, de petits poètes, car je contiens aussi de belles poésies que leurs petits enfants liront avec joie et qu'eux, devenus vieux et courbaturés, écouteront relire, les larmes aux yeux. . . .

Et fières d'avoir conquis la victoire désirée et heureuses d'avoir fait du bien à l'enfance! !

Eh! bien, cette classe se trouve sous les cieux de Bruxelles, sous les cieux de Belgique, située au coin de la rue de Gravelines et du Bd Clovis. Et son nom est 4me année préparatoire A. L'âge des écrivains est de 8 à 10 ans. Eh! bien, voici mon histoire. A vous de lire ce que je contiens, à vous de lire mes merveilles.[1]

Hélène V. de B., 11 yrs.

---

[1] *Preface III.*—I was born in a classroom, on a desk! How the girls worked to make me! How glad they were when I was finished! How delighted they were when they copied the papers whose child I am, in a beautiful book with lovely pictures. How excited they were when they learned that they would be typed on a machine. With what joy at last when all these wonderful tales had been typed, they made the pictures and put them in with fingers like fairies!

Then they reread it all. . . . I was finished!

And now I will tell you where that class is, that class of little writers, of little poets, for I contain some fine poetry too, that their grandchildren will love to read some day, when they are old and bent, and then they will listen to the reading with tears in their eyes. . . .

They will be proud too, to think they succeeded in doing what they tried to do, and happy because they did something for other children.

Well then, this class is to be found under the skies of Brussels, under the skies of Belgium, right in the corner of the rue de Gravelines and the B'l'v'd Clovis. And it is called the 4th year preparatory A. The age of the writers is 8 to 10 years. And that is my history. It is for you to read what I contain, it is for you to read my wonderful tales.

*Spelling—*

Our pupils were tested in spelling by means of the Vaney Scale. First they were given the classic phrase of Binet:

"Les jolies petites filles étudient les plantes qu'elles ont ramassées."

Vaney found children between 10 and 11 years of age averaged 4 errors in this test; our pupils of the same age (4th year of school) averaged 1.9 errors.

The four following phrases were then given:

1) Emile est un petit garçon bien sage, il écoute son papa et sa maman, il à l'école.
2) J'ai une tête, deux bras, deux jambes, une bouche, vingt dents, une langue, dix doigts.
3) Le soleil brille déjà de ses plus gais rayons. Les hommes parlent enchantant. Les bergers sont heureux de la belle journée qui se prépare, ils suivent au pâturage le grand troupeau de vaches pesantes.
4) Le garçon de ferme, de son pas lourd, entrait dans la grange encore obscure où nous reposions. Les boeufs mugissaient tout bas. Dans la cour, le coq, les poules, le chien allaient et venaient.

Vaney found children from 10 to 11 years averaged 11 errors in this test. Our children (4th year of school) averaged 5½ errors.

The following dictation was given the children April 28, 1920:

*Les merveilles de la germination* (*suite*).

Voyez ensuite la puissance de vie et de résurrection renfermée dans ces merveilleuses semences,

pour s'y conserver d'année en année, de siècle en siècle jusqu'à la fin du monde. Déposez aujourd'hui dans un tiroir une de ces graines; dans soixante ans, quand vous aurez les cheveux tout blancs et que vous ne marcherez plus qu'appuyée sur un bâton, semez-la dans la terre: vous en verrez ressuciter, au bout de peu de jours, une plante éclatante de fraîcheur et de beauté.

Average number of errors made—8.

Those readers who may be interested to test their own pupils by the above tests will appreciate the high level of achievement represented by our results.

*Number—*

Fig. No. 20 is taken from one of the note-books of observation and illustrates some of our exercises in measurement and their application to the teaching of number.

Our children were tested by means of Vaney's arithmetic scale,[1] 4th degree, 10th year of age, 4th school year. The average rating was 8.5 out of a possible 10 points.

Van Havenberghe's book on the metric system (intermediate grades) was completed by all the pupils in the class.

*Vocabulary—*

We consider the child's vocabulary a matter of very great importance, and make it a point to study all derivatives, compounds, synonyms, and hom-

[1]Vaney, *Mesure du degré d'instruction des élèves en calcul,* L'Année Psychologique, XI, p. 146.

Fig. 5.—Decoration of the classroom. End of the fourth year.

onyms of words employed in connection with each center of interest, together with illustrations and explanations of their appropriate usage and phraseology.[1]

*Decoration of the Classroom—*

The children ornament the walls of their classroom with the products of their own handiwork. Among these the charts reviewing the ground they have covered play the most important part.[2] Drawings that they consider worthy of the distinction are added, and help to brighten the room and make it attractive. All of our decorations are the result of the children's efforts. As I have already stated, in the fourth year my class voted to replace all the illustrative materials provided by the school with those of their own manufacture. (*See* Fig. 6.)

---

[1] *See* also p. 192, 199, 204, under Expression.

[2] The chart shown in Fig. 7 is an especially noteworthy example. It reflects Miss Hamaïde's co-operation in the work of the Child Health Section of Brussels, undertaken since the completion of this study. It will be evident that the entire body of subject matter (now in process of determination), which health workers desire to see incorporated in the school's teaching, at once relates itself to the "fundamental needs" and becomes an integral part of the Decroly program. —Ed.

# STUDIES OF INDIVIDUAL CHILDREN

*Although not one of the instinctive tendencies should be suppressed all may be oriented on a higher plane. . . . The combative instinct offers a striking example of the possibilities of such sublimation. . . .*

*Let us not forget either, that the child's intellect functions only through action and guard against imposing on him rules proper to the adult.*

—Ovide Decroly, *Comment l'éducaton intéllectuelle contribue à sublimer les tendances.* Pour l'Ére Nouvelle, Oct., 1923.

## CHAPTER IX

### STUDIES OF INDIVIDUAL CHILDREN

From our records of individual children we have selected the three following as representing distinct and interesting types:

*Augusta,* a gifted child, industrious from the first, of a scientific bent, concerned with the world of nature, all her activities, all her interests directed to the study of natural sciences.

*Hélène,* a splendid example of the value of this type of education for the development of a difficult child.

*Yvonne,* saved from extreme retardation as her record shows, thanks to her experiences in the Decroly class.

### *Augusta*

Augusta was born June 1, 1910. She entered our first-grade class October 1, 1916, at the age of 6 years, 4 months. An only child, she had always received the personal care of a very intelligent mother. Her father, an army surgeon, had been absent from home since the beginning of the War.

Living with her grandmother, mother and an uncle, Augusta was a good example of a "spoiled child," unsocial, and not always kind or amiable. From the first she showed high intelligence, and a great aptitude for manual work. But at the same

time she displayed a lack of effort for anything that she found at all difficult.

She was examined by the Binet tests January 4, 1917, when her mental age was found to be two years in advance. After six weeks of our work in reading, she had arrived at all the necessary generalizations,[1] and at the time of this examination read fluently, and with expression, one of the stories in Smets' third book.

Her visual memory was found to be excellent, her auditory memory was likewise good. In speaking she expressed herself with unusual facility.

To indicate the progress made by Augusta during her first four years of school we submit the following examples of her work in spelling, composition, number, observation, association, and drawing.

*Spelling—*

Augusta very quickly acquired an excellent knowledge of spelling. The examples below are taken from her dictation book in successive years.

*Le hérisson*

7/7/1917 [no mistakes]

Nous avons un hérisson dans notre jardin. La drôle de petite bête. Il a un joli museau pointu, ressemblant au vilain groin du porc, et ses poils sont changés en épines. Il passe la journée caché dans un buisson ou dans le trou d'un arbre; il ne sort que le soir et il fait alors la chasse aux insectes.

[1] *See* p. 70.

*La baleine* (*suite*)

11/4/1918 [1 mistake]

Quelle affaire s'il lui fallait les pêcher un à un! Aussi la baleine profite de l'habitude qu'ils ont de vivre en bandes longues de plusiers kilomètres. Elle commence par un bout, et, sans se presser, elle donne asile dans son estomac à toutes la société.

*Histoire d'une goutte d'eau* (*suite*)

20/6/1919 [no mistakes]

La petite goutte d'eau traversait une ville. Elle voyait de grands carrés de pierres avec des trous dedans et ne savait pas que c'était des maisons. Elle voyait beaucoup de monde allant et venant sur le bord des grands murs, jamais elle n'avait vu tant de personnes réunies. Tout à coup, elle ne vit plus rien, il faisait tout noir! La petite goutte d'eau passait sous un grand pont.

*Le genêt à balai*

2/5/1920 [no mistakes]

Le Genêt est, avec la Bruyère rose et l'Ajonc, aux fleurs jaunes comme les siennes, la parure de la lande bretonne et de toutes nos terres en friche. Sa tige se divise dès sa base en rameaux effilés, raides, anguleux au maigre feuillage d'un vert grisâtre.

Dans les pays souvent misérables, où pullulent les Genêts, ils rendent une foule de services; on en fait des bourrées pour chauffer le four, des liens, des claies; ils remplacent le chaume comme toiture et le charbonnier, dans ses campements au milieu des bois, n'emploie guère d'autres matériaux pour s'improviser une hutte; ils fournissent aussi une bonne litière au bétail, mais c'est l'abeille surtout qui fête leurs fleurs.

*Composition—*

Augusta writes with great facility and takes pleasure in writing. The following original themes are taken from her composition books of successive years. The first one represents her very first attempt at composition writing. The spelling has not been corrected.

*Le ver à soie*
11/7/1917

Le ver à soie mange des feuilles de mûrier. Nous avons reçu un écheveau de soie du cocon du ver à soie. Nous avons reçu un peu de soie qui ne se déroule pas pour coler dans notre cahier. Nous avons mis le cocon dans de l'eau tiède et sa se déroule facilement.[1]

*Le ver à soie* (*Le developpement*)
————, 1918

Dabord il y a des œufs, puis le ver en sort tout petit, puis peu à peu il grandi. Il ronge les feuilles. Allors il se fabrique un cocon. A l'école il y a un tableau du ver à soie et un petit moulin pour dérouler la soie. Le papillon qu'on nomme le bonbix du murier sort de la crisalide et ne vit que quinze ou seize jour. Alors on prend la soie. On en fait des robes et des rubans, du fil pour coudre.[2]

---

[1] *The Silk Worm.*—The silk worm eats the leaves of the mulberry tree. They gave us a skein of silk from the cocoon of a silk worm. They gave us a little roll of silk but it wouldn't unwind so we could paste pieces of it in our note-books. We put the cocoon in warm water and then it unwound easily.

[2] *The Silk Worm* (*Its Development*).—First there are the eggs, then the worm comes out very small, then it grows bigger and bigger. It eats the leaves. Then it makes itself a cocoon. At school we have a picture of a silk worm and a little reel to wind the silk with. The silk worm they call bombix of the mulberry tree comes out of the chrysalis and lives only fifteen or sixteen days. Then they take the silk. They make it into dresses and ribbons and silk to sew with.

*Une plante carnivore*
31/5/1919

Il y a quelques jours, ma petite amie Léa, nous a apporté une plante carnivore. Cette plante est très drôle. Elle a de petits poils roux, qui se recourbent, quand on lui donne de la nourriture. Nous lui avons donné à manger. Mais d'une très drôle de façon. Aussi, je vous en suplie, de ne pas rire! Nous avions pris un canif et nous avons mis sur sa lame, un peu de blanc d'œuf que nous avons mis délicatement entre ses petits poils roux. Quand nous sommes venues l'après-midi, elle avait tout digéré. Nous lui avons de nouveau donné à manger, et nous l'avons regardé avec le même plaisir que le matin.[1]

*Le tilleul*
25/2/1920

Un tilleul se trouve dans la cour de l'hôpital. Il y est déjà longtemps, très longtemps! Le tilleul plonge ses regards dans les tristes chambres, suivant du coin de l'œil, le dévouement et la tendresse de l'infirmière pour le pauvre malade. Quant arrivent les convalescents, il ne projette non seulement son ombre pour les protégers du soleil, mais ces centaines de fleurettes répandent un doux parfum, qui rend la gaîté aux malheureux. Bien souvent les oiseaux viennent donner les concerts dans ses branches, les abeilles butinent toute la journée, viennent y recueillir le suc et les timides papillons poussent leurs

[1] *A Carnivorous Plant.*—A few days ago my little friend Lea brought us a carnivorous plant. This plant is very funny. It has little red hairs that curl up when you give it food. We gave it something to eat but in a very funny way. Now please don't laugh! We took a penknife and we put a little white of egg on the blade, and this we put in gently between its little red hairs. When we came back in the afternoon it had digested every bit. So we gave it some more to eat and enjoyed watching it again just as we did in the morning.

trompes dans leurs corolles parfumées. Quant un malade est guérit et qu'il sort en jetant un dernier regard sur le tilleul, le tilleul est bien content car il a contribué à la guérison du malade! Mais il y en a qui sortent tout autrement . . . qui meurent! Alors le tilleul pleure![1]

*Arithmetic—*

During the first year Augusta did well in her work with number. In the second year she was less satisfactory and often displayed lack of attention and concentration. Toward the end of the year, however, she began again to do excellent work. This continued throughout the third year, and when measured by the Vaney scale (3d degree, 9th year of age, 3d school year) she scored 8.5 out of a possible 10 points, thus meeting the requirements of the Brussels schools for the third year's work in arithmetic. At the end of her fourth year, measured by Vaney (4th degree, 10th year of age, 4th school year) she scored 8 points out of a possible 10.

Twice a week each child was expected to submit original problems for the class to solve. Here are

[1] *The Linden Tree.*—A linden tree stands in the courtyard of the hospital. It has been there a long, long time. It casts glances into the sad rooms and watches out of the corner of its eye the devotion and tenderness of the nurse for the poor invalid. When the convalescents come out of doors the linden tree gives shade to protect them from the sun, and not only that, its hundreds of tiny flowers send out a sweet perfume to cheer the unhappy ones. Very often the birds come and give concerts in its branches, and the bees are there stealing all day long. They come to gather honey, and even the timid butterfly dips its proboscis into the perfumed corollas. Whenever an invalid gets well and goes away giving a last look at the linden tree, the tree is very happy for he has helped to make him well. But there are some who leave in a different way . . . who die! Then the linden tree weeps!

a few devised by Augusta at the end of her fourth school year.

Center of Interest: Plants

2/6/1920.

a) I have 90 bunches of grapes in my cellar to be taken to market in 8 days. When the day comes and I go to get them, 8 bunches have dried, 12 are covered with mould. How much money can I get for the rest, if each bunch sells for 1.80 fr.?

b) I have two walks in my garden. They are planted with rose bushes placed 0.75 m. apart. Each row is 500 m. long. How many rose bushes are there in all, and how many roses, if each bush bears 11 roses?

c) We made some measurements in the park of the Cinquantenaire. From the entrance of the park to the Arcade the distance is 360 m. The park is 500 m. long. How much ground does it cover in square meters? in centiares? in ares? in hectares?

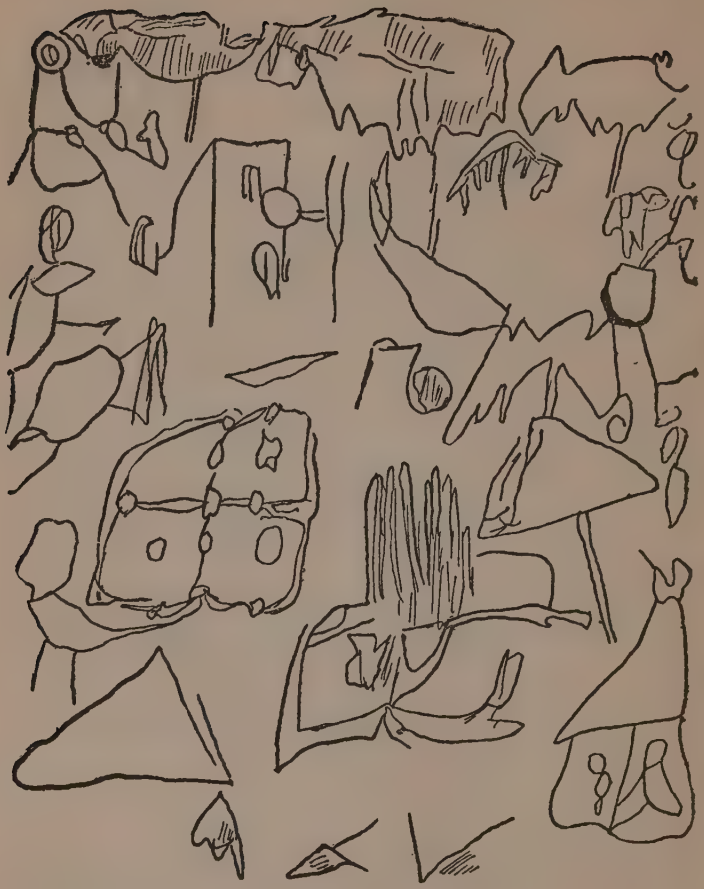
*Observation—*

The illustrations numbered 23, 24, 25, and 27 are taken from pages in Augusta's note-books of observation, first, second, third, and fourth years respectively. They give evidence of the development made during this period.[1]

*Association—*

Figures 26 and 28 are reproductions from her note-books of association for the third and fourth year. During the first and second year the children

[1]The illustrations showing pages from the children's note-books will repay examination with a good reading glass.—Ed.



Free work in drawing. Augusta's first attempt, illustrating the story of the "Three Little Pigs."

do not keep note-books for the work done in association.

*Drawing—*

Reproductions of two drawings made by Augusta during her first year of school are shown here.

Free work in drawing, Augusta, end of first year at school.

Fig. 29 shows another made in her second year at the age of 7 years and 7 months. The drawing shown in Fig. 30 was made in her third year, at the

age of 8 years, and 4 months. Figs. 31 and 32 are from drawings made in her fourth year at school, at the age of 9 years and 6 months.

## Mental Measurements

Augusta was given a psychological examination shortly after she entered school, and again at the end of her fourth school year. Results of the first examination were as follows:

*Binet Tests:*

Chronological age, 7-3 — Mental age, 10

VII, VIII, IX all passed
X passed 2, 3, 4, 5
failed 1
XI passed 2
failed 1, 3, 4, 5

*Decroly Tests:*

*Practical judgment:* box with puzzle lock.[1] Unsuccessful.

a) Oral test: 1 min. 10 sec. (1) large connecting rod; (2) screw-nut; (3) plate.

b) Opened: 5 min. (1) ring.

*Pictures:* demonstrating ability to co-ordinate ideas.[2]

The fire: 27 sec. Very well done.

---

[1]Decroly, O., *Epreuve nouvelle pour l'examen mental et son application aux enfants anormaux.* L'Année Psychologique, Vol. XX, 1914, p. 140.

[2]See *Bulletin trimestriel de l'Office intercommunal pour l'Orientation professionelle et le placement des jeunes gens et des jeunes filles de l'agglomeration bruxelloise,* No. 3, July, 1921.

The orange thieves: 18 sec., 5, 1, 2, 3, 4, good interpretation.

The new hat: 90 sec., 1, 2, 3, 5, 6, 4, 7, good interpretation.

The jam closet: 75 sec., 1, 2, 3, 5, 4, 6, 7, 8, good interpretation.

*Reconstruction of puzzles:*

The head +, 20 sec.
The house +, 15 sec.

*Attention:*

Bourdon's test, 4¾ min., 4 errors.

*Head Measurements:*

Diam. frontal-occipital, 15.8 cm.
Diam. temporal, 12.6 cm.

*Dynamometer:*

Right hand, 19 kg.
Left hand, 29 kg.

In her second examination at the end of the fourth school year, Augusta scored as follows:

*Binet tests:*

Chronological age 10-11 Mental age, 14

X all passed
XII passed 1, 2, 3 (test 3—106 words, good associations),
failed 4, 5

XV passed 1, 2, 3, 4 (test 1—7 digits. Test 2—3 rhymes in 15 sec., "*assurance, croyance, mefiance.*"),
failed 5
Adult, passed 1, 3, 4, 5
failed 2

Some details of the above may be of interest, for example, the use of the three words indicated in the test, Bruxelles, ruisseau, fortune.

"Avant d'arriver à Bruxelles, je dus passer près d'un ruisseau, au bord de celui-ci, je vis un homme déguenillé, qui pleurait amèrement. Je lui demandai les causes de son chagrin, il me dit qu'avant il était riche mais qu'il avait perdu sa fortune au jeu."[1]

Her definitions of kindness, charity, justice were as follows:

"*La bonté* est une qualité qui fait qu'on est bon et agréable pour les personnes.

*La charité.* Action qui est une belle action, qui fait le bien.

*La justice.* C'est ce qui doit se faire dans certaines circonstances."[2]

*Decroly tests:*

*Puzzle box:* with difficult lock. Successful.

[1] "Before reaching Brussels, I had to pass a stream on the banks of which I saw a man in rags who wept bitterly. I asked him the reason for his sorrow and he told me that he used to be rich but he had lost his fortune at play."

It will be noted that Augusta divided the above into two sentences, which, under ordinary circumstances would prevent its being credited under the 12-year tests. The thought is however so closely related, and both thought and expression are so mature, it was decided to credit it to the 12-year rather than to the 10-year series.

[2] "*Kindness* is a quality that makes one good and agreeable to people.
*Charity.* An act that is beautiful, that does good.
*Justice.* Something that has to be done in certain circumstances."

a) Oral test: 1 min., (1) screw-nut; (2) ring; (3) spring; (4) large connecting rod; (5) small connecting rod.

b) Opened: 2 min. 25 sec., (1) screw-nut; (2) small connecting rod; (3) ring; (4) spring; (5) fork; (6) large connecting rod.

c) Closed: 3 min. 15 sec., (1) plate; (2) large connecting rod; (3) fork; (4) small connecting rod; (5) spring; (6) screw-nut.

*Pictures:*

The shower-bath: 60 sec., 1 error which she corrected immediately.

The newspaper: 2 min. 50 sec. Very good.[1]

Augusta's special interest in plant and animal life is reflected in the specimens of her work and in the answers given to the questionnaire on affectivity (*see* Appendix B.) submitted to her family during her 4th year at school. Indeed, many of the brief statements contained in the questionnaire, those testifying to her desire to live "next to nature" to be a farmer, to raise animals, and to her holiday trips in search of specimens and the evenings spent in reading about her "finds," even the opinion expressed that she is a "dreamer"—rather astonishing in view of the other facts as to her personality—all show how decided is her bent and with what

[1]The teacher's judgment charts Nos. I and II shown in Appendix A. present an estimate of Augusta's general development at the end of the second and of the fourth years of school.

unusual ability and initiative she has attacked her special field of interest. Must we insist that in the Decroly Class this budding scientist found what she most needed to stimulate her individual interests, to orient them, and to provide her with a technique for their pursuit, and that this was achieved without narrowing her school experience in other directions?

Augusta has now entered the fifth grade, where no attempt has been made to modify the school work in accordance with the Decroly plan. At first she experienced a little trouble in adapting herself to the requirements of the conventional school, but at the end of three months she was doing excellent work.

Outside of school she continues to follow her chosen field of science. She owns some splendid collections, the results of her own personal industry (insects, butterflies, shells, fruits). Her special interest lies in plant and insect life, and of these subjects she has already a wide knowledge.

### *Hélène*

Hélène was born December 15, 1909. She entered the Decroly Class at the beginning of our second year, at the age of 8 years and 3 months. She had previously attended no less than three convent schools but had not remained in any one of them because she had been found so unmanageable. When she first came to us she was a most difficult child. She quarreled continually with the other children and made herself thoroughly obnoxious to them.

Fig. 6.—Gathering aquatic specimens.

She was cordially disliked and generally played alone or amused herself by teasing the others. She was most trying, too, in the classroom, seldom polite, and often very rude. She came from a family of very intelligent tradespeople, but her parents, unfortunately, had been able to give her very little personal attention. She had two brothers with whom she quarreled constantly, and a governess who had not the slightest control over her.

From the first Hélène displayed excellent powers of comprehension, judgment, and reasoning ability, but in the beginning she was quite indifferent to her school work. Little by little, however, she became interested, and before long was completely won over by the classroom activities.

In the third grade she began to do splendid work, work that showed an unusual degree of understanding and mental ability. She exhibited, too, originality and initiative. The same measure of praise could hardly be accorded her behavior, however. Only too frequently she was brusque, impolite, unkind, and on many occasions she succeeded in exasperating everyone about her.

But a relatively slight occurrence served to bring about a complete change in her attitude. This was the sending home of the following report:

"*Appreciation*

I have only praise for Hélène. Her work has been excellent and her behavior also. During the whole three months I have not found it necessary to reprove her once, and the constant effort she has

made certainly deserves commendation. I am particularly pleased with this improvement and have great hopes that she will continue in the course she has begun."

These remarks of mine were supplemented by Mlle. Carter, who wrote:

"Mlle. Hamaïde's praise of Hélène has been well merited and I wish to add my own to hers. My little pupil has kept the promises she made to me in her New Year letter. Not only has she worked hard and achieved splendid results in her school work, but she has kept the resolutions she made about overcoming certain faults that have hampered her. For nearly three months she has lived up to these resolutions every day. I hope she will continue to do as well as she has done, and I congratulate her with all my heart."

THE PRINCIPAL.

This report affected Hèléne deeply, so much indeed, that on hearing it read aloud by Mlle. Carter she burst into tears. It marked the beginning of a period of continued improvement. In fact a decided change for the better came over the child. She grew more social in her relations with her classmates, and displayed much affection for me and a great desire to please me. But from time to time she still had periods of great excitability and Dr. Demoor was finally consulted. He prescribed a régime for her from which she benefitted considerably. Later she was taken to Dr. Decroly who talked with her and made her realize that she was causing great unhappiness to her family and to all about her. She

promised to make a change in this, and change she did. The long vacation ended, she returned to school much less excitable, and determined to do her best. She came to me of her own accord and assured me she was going to be well behaved and to work hard. And from that time it was indeed hard to recognize the little demon of the old days. From the very first she did well, and began to exhibit a decided bent for composition and for drawing. Thus while doing good work in other respects, she soon excelled in these two fields.

She still remained an individualist, however, never accepting willingly a piece of work that had been prescribed, but attacking such work quickly and methodically nevertheless, in order to devote any time she might save thereby to her own favorite pursuits. Unusually active, and able to distribute her attention, she kept always on her desk some piece of original work to which she might devote odd moments.

She soon began to enjoy a great popularity. Her classmates grew to admire her immensely, and began to look to her for advice in connection with their own creative work. She became a real leader, intelligent and full of initiative. Her little community took directions from her, liked her, and listened to her. They imitated her as well, and the whole class was influenced by her personality. And this was the child who, two years before, had appeared to be quite impossible, who had seemed indeed to make a point of being disagreeable to everyone.

One day she came to school with a "law" that she had written. This she showed to her classmates, proposing they should all pledge themselves to follow it. The original was worded as follows:

*Notre loi*

"I. Tu aimeras ton père, ta mère, tes grands-parents et tous ceux don se compose ta famille, ainsi que tes amis que tu respectera.

II. Tu fuyra les mauvais compagnon, tu tacheras de ne pas avoir de défauts. Sois sincère, ne sois pas jaloux, vaniteux, fier de tes défauts, de ton intelligence dont tu n'a aucun mérite, surtout ne sois pas menteur, pas orgueilleux.

III. Respecte la viellesse, les infirmes, soulage les malheureux, donne aux pauvres, réconcilie les tristes.

IV. Lave-toi, lève-toi sans difficultés.

V. Aide tes parents dans le besoin, aide tous ceux qui en ont besoin.

VI. Respecte toutes les religions, les religieux.

VII. Obéit sans difficulté.

VIII. Le soir fait ton examen de conscience.

IX. Fait tous tes devoirs, avec soins, sans paresse. Apprend tes leçons. Ne parle pas en classe, ne chipote, ne fait que ce que tu trouves bien at ce qu'on te commande.

X. Ne pas maltraiter les animaux, les défendre.

XI. Ne pas être gourmand, parce la gourmandise mène au vol et le vol à la prison.

XII. Ne pas cueillir des plantes pour desuite les jeter.

XIII. Se perfectionner."[1]

The following specimens of her work show the development made by Hélène since she entered school.

*Spelling*

Dictation exercises taken from her note books.

*La baleine (suite)*

Second year 3 mistakes

Quelle affaire, s'il lui faillait les pêcher un a un! Aussi la baleine profite de l'habitude qu'ils ont de vivre en bandes longues de plusieurs kilomètres. Elle commence par un bout, et, sans se presser elle donne asile dans sont estomac à toutes la sociétée.

*Histoire d'une goutte d'eau*

Third year 5 mistakes

La petite goutte d'eau traversait une ville. Elle

[1] *Our Law.* I. Love your father, your mother, your grandparents, and everybody in your family, as well as your friends.
II. Keep away from bad company, look out for your own faults. Be honest, don't be jealous or vain, or proud of your faults, or of your brains—no credit is due you for having them—worst of all don't tell lies, don't be conceited.
III. Be thoughtful of old people and sick people, help the unfortunate, give to the poor, comfort people who are unhappy.
IV. Wash yourself, dress yourself without making any fuss.
V. Help your parents when they need help, help others when you can.
VI. Obey at once.
VII. Respect all kinds of religion and all priests and sisters.
VIII. Examine your conscience every night.
IX. Do all your work carefully and don't be lazy. Learn your lessons. Do not talk in class or waste your time, do only what you think is right and what you have been told to do.
X. Don't be unkind to animals, protect them.
XI. Don't be greedy, greediness makes people steal, and people who steal go to prison.
XII. Don't pick flowers just to throw them away.
XIII. Improve yourself.

voyait de grands carré de pierre avec des trou dedans et ne savais pas que c'étais des maisons.

Elle voyait beaucoup de monde, allant et venant sur le bord des grands murs, jamais elle n'avais vu tant de personnes réunies. Tout à coup elle ne vit plus rien, il faisait tout noir! La petite goutte d'eau passait sous un grand chêne.

*Le genêt à balai*

Fourth year 6 mistakes

Le genêt est avec la bruyère et l'ajonc aux fleurs jaunes comme les siennes, la parure de la lande bretonne et de toute nos terres de friche. Sa tige se divise, dès sa base en rameaux effilés, raides, anguleux au maigre feuillage d'un vert grisâtre. Dans les pays, souvent misérable *ou* pullulent les genêts *il* rendent une foule de services.

On*t* en fait des bourrées pour chauffer le four, des liens, des claies, ils remplacent le chaume comme toiture; et le charbonnier dans ses campements au milieu des bois n'emploie guère d'autres materiaux pour s'improviser une hutte; ils fournissent aussi une bonne litière au bétail, mais c'est l'abeille, sourtout qui fêt*ent* leurs fleurs.

*Composition—*

All of Hélène's writing was done in the schoolroom and without making a rough draft first. In the following examples the original spelling has been retained.

*Un voyage aux environs de Woluwé*
(Second year)

Woluwé est très agréable. On y fait de belles promenades. On y voit des bois, des prés avec des ruminants au pâturage. Il y a le bois des 3 couleurs,

les 4 bras. Le bois Madou et le bois des bruyères.[1]

*Saint-Nicholas*
(Third year)

Le matin de ce jour j'ai été chez bonne-maman où j'ai fait un petit colier rose et blanc. J'ai aussi servi au magasin et j'ai fait des courses. J'ai également été près de bonne-maman qui était malade. L'après-midi j'ai été au cinéma avec ma tante Rosa, et j'ai été voir la tombe de mon petit cousin, mais il n'y a pas encore de pierre dessus. Elle est entourée d'une mince chaîne entourée de rubans tricolores aux 4 coins il y a un gros nœud tricolore dans le fond son portrait est mis entouré de chrysanthèmes et de branches de sapin vert ainsi que de laurier.[2]

At the beginning of the fourth year Hélène began to take special interest in her composition. She wrote with great facility and produced some real little masterpieces. One has only to read the class collection of stories, "Pour les petits—par les petits," to appreciate her work. Here are several of her most interesting contributions.

---

[1] *A Trip to the Suburb of Woluwé.* Woluwé is a very nice place. You can take nice walks there. You can see woods and fields with ruminants eating the grass. They have there the wood of 3 colors and 4 arms. Madou wood and the wood of the heather plants.

[2] *Saint-Nicholas.*—In the morning I was at grandmother's and strung a necklace, a pink and white one. I helped in the shop too, and ran errands. And I stayed by grandmother because she was ill. In the afternoon I went to a movie with Aunt Rosa, and I went to see the grave of my little cousin, but it hasn't any stone yet. All around the outside was a thin chain with tri-color ribbons all over it in each corner was a big bow of tri-color and in the middle was his picture with chrysanthemums all around it and branches of green fir and laurel leaves.

*A travers l'Europe* (subject of her own choosing)
12/12/1919

Je suis Nenny.

Je suis Nenny qui voyage.

Je suis Nenny qui voyage et je vais voir les modes pour rapporter les plus jolies.

Je suis Nenny, le tout petit et je fais mes voyages sur les dos des cigognes. J'ai vu de belles fillettes, le petit bonnet à cornette, et la jupe bouffante et le tablier de dentelle et les petits sabots de bois, devinez donc leur nom, c'étaient?

De petites Hollandaises!

Je suis Nenny, qui ai vu encore de belles fillettes, jupon bleu pâle, aux galons de velours noir, au corsage de même fermé d'un ruban de soie et blouse en nanzouk et tablier de même, de beaux petits bas blancs, des petits souliers vernis et un grand nœud de satin noir dans les cheveux, devinez donc leur nom, c'étaient?

De petites Alsaciennes!

Je sui Nenny qui, dans mes voyages, ai vu sur le haut de l'alpage, de mignonettes chevrettes gardées par une fillette et un petit garçon, Pierrot, pantalon à deux bretelles de velours noir, à blouse blanche, à chapeau vert surmonté d'une plume causait avec Pierrette, de même vêtue mais avec un gentil jupon "aussi à deux bretelles."

Je suis Nenny.

Je suis Nenny.

Nenny, Nenny le tout petit!

*Across Europe.*—I am Nenny. I am Nenny the traveler. I am Nenny the traveler and I am going to see the fashions, and bring back the prettiest ones.

I am Nenny, the very little person and I do my traveling on the storks' backs. I saw some pretty little girls, they had mob caps and their skirts stuck out and they had little lace aprons and wooden shoes, guess their names, they were?

Little Dutch girls!

I am Nenny, and I saw some more pretty little girls, they had pale

blue petticoats with rows of black velvet ribbon and their waists were black velvet and laced with silk ribbons, and they had blouses of nainsook, and aprons of it too, and pretty little white stockings, and shiny little shoes and great big bows of black satin in their hair, guess their names, they were?

Little girls from Alsace!

I am Nenny, and on my travels, up in the Alps I saw such cunning little goats, and a little boy and a little girl were watching them, Pierrot had trousers of black velvet with straps going over his shoulders, and a white blouse and a green hat with a feather in it, and he was talking with Pierrette and she was dressed just like him, only she wore a ladylike skirt and it had straps over the shoulders too.

I am Nenny. I am Nenny. Nenny, Nenny the very little person!

*Saint-Nicolas*

6/12/1919

Tous les petits enfants sont en fête, c'est presque la St-Nicolas. Dans les magazins de joujoux on voit Arlequin et Colombine, le toutou noir, les poupées, les vélos, les berceaux, les bébés aux joues roses dans leur robe de mousseline, le petit piano, le sabre, le fusil, les grands ours de peluche, les chevaux en carton.

Oh! que c'est beau! Oh! que c'est joli, ces poupées avec leurs grandes boucles qui flottent sur leur robe de soie! Oh! Mais si l'on va voir au fond des impasses, nous ne verrons que des enfants qui pleurent, pourquoi?

Pourquoi, nous avoir des joujoux quand eux meurent de faim, tremblent de froid, pourquoi?

Ils sont là devant les grands étalages des bazars, ils sont là qu'ils admirent les larmes aux yeux, pensons à eux. Déjà tous nous pensons aux poupées de chocolat, aux petits cochons de massepain, aux carottes et aux navets, aux bonbons de toutes espèces, déjà on apprend les chansons du grand St-Nicolas, déjà on entend des petites voix qui répètent:

Saint-Nicolas, patron des écoliers.

Apportez-nous du sucre dans nos petits souliers.

Oh! oh! quand j'y pense! Que ce sera joli.
(*See* Fig. 33.)

*Saint-Nicholas.*—The children all know it's holiday time. St. Nicholas is nearly here. In the toy shops you can see Harlequin and Columbine, black bow-wows, dolls, velocipedes, cradles, baby dolls with rosy cheeks and long white dresses, toy pianos, swords, guns, big bears of plush, horses made of cardboard.

Oh, but it's fine! Oh, but it's beautiful! These dolls with their long curls floating over their silk dresses! But if we should take a look down the blind alleys, we would see only children who cry, why is that?

Why is it so, that we should have toys while they are starving of hunger and shivering with cold, why?

There they stand in front of the big stores, looking at what's in the windows, with tears in their eyes, let's remember them. Already we are thinking, all of us, of dolls made of chocolate, of little marzpan pigs, of carts, of ships, of candies of every sort, already we are learning the songs of good St. Nicholas, already you can hear little voices saying:

Good St. Nicholas, patron of school children.
Bring with you sweetmeats to put in our shoes.
Oh! oh! To think of it! Won't it be fine!

*A mon saule pleureur*
21/7/1920

Pourquoi donc à tes pieds coule un ruisseau?

Est-ce donc tes larmes qui creusèrent le ravin où coule, coule le filet d'eau?

Et son chant monotone? Est-ce pour toi qu'il fut créé? Pourquoi as-tu pleuré?

Pourquoi tes bras sont-ils en bas?

Pourquoi? La vieillesse?

Non, la tristesse!

La rivière te console et tu restes morose.

Dans tes branches pourtant l'oiseau gazouille et rit!

Pourquoi?

Pourquoi? redit l'oiseau, pourquoi?

Et la rivière aussi. Pourquoi?

Son chant devient plus triste et c'est toi qui le veux!

Oh! mon saule pleureur!
Pourquoi?

(*See* Fig. 34.)

*To My Weeping Willow.*—Why does the brook run at your feet?
Were they your tears that dug the channel where flows, flows the tiny stream?
And that song in monotone? Is it sung to you? Why are you weeping?
Why do your arms stretch downward?
Why? Is it with age?
No, it is sorrow!
The brook tries to console you, but still you weep.
In your branches perhaps a bird is singing and laughing!
Why?
Why? the bird asks you, why?
And the brook too, asks you why?
His song grows sadder and you like to have it sad!
Oh! my weeping willow!
Why?

During the year Hélène wrote 54 compositions, 17 of which were chosen by the class for their book of selections. All are charming and exhibit a comprehension and poetic feeling beyond her years.

*Arithmetic*—

All the tests of the Vaney scale (4th grade) were passed successfully. The following problem is one of the most interesting of those devised by her for the class to solve.

Problem: I have a wish. My wish is to make an orchard. It would be shaped like a triangle, 100 metres in height on a base of 250 meters. I would enclose it with a trellis at 10 francs a meter, and every three meters I would put an iron picket costing 5 francs. What would it cost to do this? I would plant the trees three meters apart, all around as well as inside, but in a triangular shape with 1 in the middle, at 6 francs apiece. The rest of the

ground would be planted with grass seed at the rate of 2 francs a kilo.

The ground will cost 20 francs per square meter. How much will my orchard cost me? Manual labor costs 2 francs an hour, it will take 24 hours work to enclose it and 12 hours to plant 20 trees.

Draw the orchard to the scale of 5 cm. to 100 m.

*Drawing—*

Hélène is gifted at drawing. In this as in her other work she shows excellent powers of observation, of judgment and reasoning ability. Figures 33, 34, 35, 36, 37, 38, 39, give an idea of her facility in drawing as well as of her taste and imagination.

## Mental Measurements

Results of the mental tests given Hélène during the first year of her work with us (second grade) were as follows:

*Binet Tests:*

Chronological age 8-6 — Mental age 10

VII all passed (test 2, gave detailed descriptions)

VIII all passed

IX all passed (test 2, definitions superior to use; "a mamma is a lady they give to a child to take care of it."

X all passed (test 3, excellent replies given quickly. Test 5, "At Brussels they have fortune and rivers.")

XII passed 1, 2
failed 3, 4, 5

*Decroly Tests:*

*Practical judgment:* box with puzzle lock. Passed

A. Oral test: 40 sec., (1) small connecting rod; (2) large connecting rod; (3) hinges.

B. Opened: 4 min. 50 sec., (1) ring; (2) screw-nut; (3) plate; (4) small connecting rod; (5) fork; (6) spring; (7) large connecting rod; (8) hinges.

C. Closed: 4 min. 30 sec., (1) hinges; (2) large connecting rod; (3) spring; (4) fork; (5) small connecting rod; (6) plate; (7) screw-nut; (8) ring.

*Pictures:*

The fire: 20 sec. Very good.

The orange thieves: 34 sec. Very good.

The new hat: 1 min. 20 sec. 2, 3, 6, 5, 7, 1 (interpretation of her own).

The jam closet: 1 min. 30 sec. Very good.

The newspaper: 3 min. 54 sec. 1, 3, 5, 4, 6, 2, 7.

*Reconstruction of puzzles:*

The head +, 5 sec.

The house +, 27 sec.

*Attention:*

Bourdon's test, 5 min. 6 errors.

*Head measurements:*

Diam. frontal-occipital, 17.2 cm.

Diam. temporal, 14.7 cm.

*Dynamometer:*

Right hand: 27 kg.

Left hand: 30 kg.

Hélène was re-examined at the end of our fourth grade year when the following results were obtained:

*Binet tests:*

Chronological age 10-7 Mental age 13

X all passed

XII all passed (test 3, 116 words, excellent associations)

XV passed 2, 3, 4, 5
failed 1 (6 digits)

Adult: Résumé of quotation from Hervieu +

Here are some details that may be of interest. The definitions given under XII, test 4, were as follows:

*Bonté:* c'est une qualité par laquelle on cherche le bien des autres de toutes les façons, pour plus tard et maintenant.

*Charité:* c'est donner à ceux qui en ont besoin ou se dévouer pour des personnes (comme les infirmières.)

*Justice:* dire des choses telles qu'elles sont.[1]

Her sentence including the words Bruxelles, ruisseaux, fortune, read:

"Si Bruxelles n'avait pas de ruisseaux pour rendre ses terres propres à la culture il n'y aurait pas de plantes mème pour une fortune."[2]

In the adult tests she gave this résumé of Hervieu's thought:

[1] *Kindness:* is the quality by which one seeks the good of others in all sorts of ways, for the future and also for the present.
*Charity:* is to give to those who are in need or to devote yourself to other people (the way trained nurses do).
*Justice:* is to tell the real truth about things.

[2] If Brussels had no rivers to make the ground fit for cultivation she could have no plants, not even for a fortune.

"Certaines personnes disent la vie bonne, d'autres mauvaise, d'autres encore la disent médiocre. Ce qui est le plus juste c'est qu'il y a de bons moments et de mauvais. On a rarement un malheur aussi grand que celui qu'autrui vous souhaite et si la vie était toujours comme on la voudrait elle serait bien plus souvent injuste."[1]

*Decroly Tests:*

*Puzzle box:* with difficult lock. Passed.

a) Oral test: 5 sec. Very good.
b) Opened: 55 sec. Very good.
c) Closed: 1 min. 50 sec. Very good.

*Pictures:*

Charity: 20 sec. Very good.
The shower bath: 45 sec. Very good.
The newspaper: 1 min. 30 sec. Very good.

*Tests with the marbles* (for rapidity and precision):

Rapidity: right hand, 25 sec.
left hand, 20 sec.
Precision: right hand, 25 sec.
left hand, 30 sec.[2]

Hélène is now in the fifth grade. She adapted herself at once to the demands of the conventional school and stands well, but she devotes little effort

[1] "Some people call life good, others call it bad, others again say it is neither good nor bad. It is nearer the truth to say that there are some good moments and some bad ones. Our misfortunes are seldom as great as those others wish for us and if life were always as we would like it it would be much more often unjust."

[2] The teacher's judgment charts Nos. III and IV shown in Appendix A. present estimates of Hélène's general development at the end of the second grade work (her first year in the Decroly Class) and at the end of the fourth grade.

to the accomplishment of her school work. Her ambitions are of another kind. She is anxious to be my second and to assist me in working out the Decroly plan with my new class. With some aid from her classmates she has made the greater part of the device materials we have used this year for our reading games. She takes an active interest too, in what goes on in the younger class, and has devised a number of little stories, plays and recitations for the children's use. These have given the little ones great pleasure. The following series is one that she wrote, illustrated and made into a book for them. (*See* cuts Nos. 36, 37, 38, 39.)

*Pour fêter grand-papa*

Comédie en 1 acte jouée par toutes les petites filles.

Personages:

*Grand-papa* (se courbant sur son bâton, quand il arrive).
*Grand'maman raisin* (arrive lentement et sans bruit).
*Maman marron* (arrive à temps pour entendre la dernière phrase de grand' maman raisin.)
*La pomme* (petite fille de maman marron).
*La poire* (petite cousine de la pomme).

(Enfants de cinq à six ans.)

*La poire.* J'ai mis aujourd'hui ma jolie robe jaune et rouge pour fêter grand-papa Cabosse.
*La pomme.* Moi je n'ai pas su mettre une robe jaune et rouge.
*La poire.* Et pourquoi cela?

*La pomme.* Maman ne veut pas la faire; elle dit qu'il n'est pas encore temps.
*La poire.* Oh!
*La pomme.* Oui, il faut du soleil pour qu'elle puisse s'achever.
*La poire.* Je ne sais pas si cela est vrai.
*La pomme.* Et j'ai tant pleuré que maman m'a vite acheté une robe avec du rouge.
*La poire.* Celle-là! Mais elle est belle.
*La pomme.* Oui, je me suis consolée.
*La poire.* Tiens! Bonne-maman raisin arrive!
*La pomme.* Quelle jolie robe en velours!
*Bonne-maman raisin.* Bonjour, mes petites! Que vous êtes jolies aujourd'hui. Grand-papa sera content.
*Maman marron* (qui vient d'arriver). Oh! oui, il sera content.
*La pomme.* Tiens, maman!
*La poire.* Tante marron!
*Le marron.* Bonjour!! bonjour!!
*La poire.* Tante marron, ta robe est bien brune aujourd'hui.
*La pomme.* Mais, maman, tu n'a plus ta cape verte.
*Maman marron.* Je l'ai ôtée, car elle est sale et brune et ses beaux picots sont cassés.
*Bonne-maman raisin.* Tu vois marron, j'ai mis ma robe de velours mauve foncé.
*Maman marron.* Tiens, oui! C'est bien joli!
*Poire et pomme.* Chut! Voilà Bon-papa.

(Ils s'embrassent et souhaitent la bonne fête au Bon-papa qui vient d'arriver.
Ils s'en vont au jardin en soutenant Bon-papa qui pleure de joie!)

*For Grandfather's Birthday*

Play in one act to be presented by all the little girls

Characters:

*Grand-papa* (who comes in leaning on his cane).
*Grand-mamma Grape* (who comes in slowly and quietly).

*Mamma Chestnut* (who comes in just in time to hear the last words of what Grandmamma Grape is saying).
*The apple* (Mamma Chestnut's little girl).
*The pear* (the apple's little cousin).

Children 5 to 6 years old.

*The pear.* I put on my pretty yellow and red dress today to celebrate Grand-papa Cocoa-pod's birthday.
*The apple.* And I wasn't able to put on a red and yellow dress.
*The pear.* But why not?
*The apple.* Mamma wouldn't do it. She said it wasn't time yet.
*The pear.* Oh!
*The apple.* Yes, she has to have sunshine before she can manage it.
*The pear.* I wonder if that's true!
*The apple.* And I cried so hard that mamma bought me a dress with some red in it.
*The pear.* That one! Well, that's pretty.
*The apple.* Yes I am quite satisfied with it.
*The pear.* Look! Here comes Grand-mamma Grape!
*The apple.* What a lovely velvet dress!
*Grandmamma Grape.* How-do-you-do my dears? How nice you look today! Grand-papa will be delighted.
*Mamma Chestnut* (just coming in). Oh! yes, he will be delighted.
*The apple.* Look! It's mamma!
*The pear.* Aunt Chestnut!
*The chestnut.* How-do-you-do! How-do-you-do!
*The pear.* Aunt Chestnut, your dress is very brown today.
*The apple.* But mamma, you haven't your green cape any more.
*Mamma Chestnut.* I took it off, it was so soiled and brown and its beautiful prickers were broken.
*Grandmamma Grape.* You see, Chestnut, I have put on my dark mauve velvet.
*Mamma Chestnut.* Yes indeed! It is very pretty!
*The pear and the apple.* Hush! Here comes Grand-papa!

They embrace Grand-papa as he comes in and wish him a happy birthday. Then, all surrounding him, they go into the garden, while Grand-papa weeps for joy.

## *Chez les joujoux*

### Comédie en 1 acte

*La balle.* Savez-vous mes amis, mon histoire merveilleuse?
*Tous.* Non! Non!
*La balle.* Au-dessous de ma peau il y a du son.
*La poupée.* Qui vient du blé.

*Le filet de paille.* Pas tout à fait, c'est l'enveloppe des graines.

*Le petit oiseau empaillé.* Ah! oui, comme on me donnait! C'est la tige des épis qu'on a mis dans mon corps.

*La poupée.* Un épi! Mais qu'est-ce cela?

*La tambour* (majestueux). Un épi? C'est l'ensemble de beaucoup de grains.

*La poupée.* C'est avec le grain qu'on fait le bon pain.

*La balle.* Oui, et savez-vous comment on fait du pain?

*La poupée.* Je le demanderai à maman, tu verras, elle lira une jolie histoire et nous pourrons tous écouter.

*Le tambour.* Elle est gentille, ta maman! Elle me donne toujours des coups de bâton.

*L'oiseau empaillé.* Elle est fâchée parce que je ne chante pas.

*La balle.* Elle me donne des coups de pied pour que je roule à terre.

*La poupée.* Elle est bien gentille, elle me caresse tendrement et elle m'endort en chantant.

(La poupée chante les deux premières lignes seule, puis tous l'accompagnent.)

Fais dodo.
Bébé do.
Bébé do.
Ma poupée,
Mon amour!
Fais dodo,
Je te berce,
Dans mes deux bras.
Qu'elle est gentille!

(Tous chantent ensemble)

Rêves des rêves d'or
Rêves qu'au paradis
Tu mange des brioches.
Ou des pommes d'api.
Fais dodo.
Bébé do.
Tu feras des rêves d'or.
Il viendra
Saint-Nicolas
It t'apportera une soeur.
Allons Bébé.
Allons Bébé.
Fais dodo . . . dodo . . . dodo.

(Le rideau tombe et tous mettent la tête sur leur bras et semblent dormir.)

*Among the Toys*

A play in 1 act.

*The ball.* My friends do you know my wonderful story?
*All.* No! No!
*The ball.* I have bran underneath my skin.
*The doll.* And that comes from wheat.
*The wisp of straw.* Not exactly, it is the husk of the kernels.
*The little stuffed bird.* Oh, yes such as they gave me. It's the straw from the wheat ears they put inside of me.
*The doll.* A wheat ear? But what is that?
*The drum* (majestically). A wheat ear? That's a great many kernels all together.
*The doll.* It's from the kernels that people make bread.
*The ball.* Yes, and do you know how they make bread?
*The doll.* I shall ask my mamma. Wait and see, she will read a lovely story about it and we can all listen.
*The drum.* She is very nice, your mamma. She always gives me a few taps with the drumstick.
*The stuffed bird.* She doesn't like it because I don't sing.
*The ball.* She kicks me to make me roll on the ground.
*The doll.* She is very nice indeed, she pets me and puts me to sleep and she sings to me.

(The doll sings the first lines of the following song alone, then the others all join in.)

Go bye-bye.
Baby bye.
Baby bye,
My dolly,
My love!
Go bye-bye,
I rock you,
In my two arms.
You are so sweet!

(All sing together)

Dream golden dreams
Of paradise
With buns to eat
Or apples red.
Go bye-bye.
Baby bye.
You shall have golden dreams.
And he will come,
St. Nicholas,
He'll bring you a sister.
Come baby,
Come baby
Go bye-bye—bye-bye—bye-bye.

The curtain falls as all rest their heads on their hands and seem to sleep.

*Ma poupée*

(Sur la poupée de chiffon faite par les petites filles.)

Ma poupée est très jolie,
Je vous l'assure sans orgueil,
Regarde comme elle rit
Et agrandit son bel œil.

Mais oui! C'est moi qui l'ai faite
D'un bout de jupon de maman.
Croyez-vous que cela se jette,
Du beau tissu de coton blanc?

Il m'était resté un p'tit bout,
Je lui en ai fait un mouchoir,
Elle fait même derrière Cou . . . cou!
Ma belle poupée aux beaux yeux noirs.

Je lui ai peint la frimousse
Et dessiné les cheveux.
Elle a un manteau vert mousse
Il est de beau tissu laineux.

De chapeau ell n'a point encor
Il n'y a pas tant de soleil
Il n'y a point de roses vermeilles.
C'est l'hiver et tout cela dort.

Le soir je la prends dans mon lit
Elle est bien sage alors.
Et elle ne s'endort
Que lorsque la lampe plus ne luit.

Le matin je la prends en classe
Ma poupée que j'aime tant
Et jamais elle ne se laisse
D'apprendre a . . . i et an,
Je l'aime tant.

*My doll*

(On a rag doll made by the little children)

My dolly is very pretty
That's not boasting because it's true.
See how wide she opens her eyes
And how she smiles at you.

Why yes, I made her myself
From a skirt of mamma's one day,
A good piece of white cotton cloth,
You wouldn't have thrown it away?

And there was a little scrap left
To make her a handkerchief, too.
Back of it she sneezed—chou, chou!
My beautiful dolly with eyes so black.

I painted her eyelashes for her
And made her beautiful hair.
And she has a moss-green cloak
Of fine woolen cloth to wear.

Her hat, well she hasn't one yet
The sun hasn't very strong rays,
The red roses are not in bloom
Flowers are asleep these winter days.

When night comes, I take her to bed
And she's very good about it.
But she never goes to sleep
As long as the lamp is lit.

In the morning I take her to school
My dolly, I love her I do,
And she never stops learning
Her a, e, i, o, u—
I love her, I do.

*Jean-Lapin*

Jean-Lapin est dans la plaine.
Il a entendu pif . . . paf!
Jean-Lapin court dans la plaine,
Il a entendu pif . . . paf!

"C'est un chasseur sans doute"
Se dit alors Jean-Lapin;
"Je vais le mettre en déroute"
Continue bon Jean-Lapin.

Hélas il s'est arrêté
Pour aussi bien réfléchir.
Et le chasseur a tiré
Et Jean-Lapin doit fléchir.

Alors il vit sur le chemin,
Tout blanc comme un flocon de neige
Un peu de poils de Jean-Lapin,
C'était le bout de sa queue beige.

Enfin! Tout cela arrive! se dit
Notre Jean-Lapin
Un petit peu de parti.
Ce n'est qu'un petit brin.

Pourtant Jean-Lapin se promet
De ne plus se laisser prendre.
Il est un làpin tout fait.
Qui ne se laisse point vendre.

Jean-Lapin a trop pensé.
Le chasseur a retiré.
Le bout de l'oreille partit
Pas de chance au pauv' petit.

Jean-Lapin devient plus malin.
Il rentre dans son terrier
Et se dit: "Bon Jean-Lapin
Sait que le mieux, c'est son terrier."

Il a compris le proverbe
Que lui disait sa mémé,
Et que mieux vaut l'herbe
Du petit coin où l'on est né.

*Jack-Rabbit*

Jack Rabbit in the field one day
Heard a sudden piff . . . paff!
Jack Rabbit as he went his way
Heard a sudden piff . . . paff!

"It's a hunter without doubt"
To himself Jack Rabbit said;
"I must chase the fellow out"
To himself Jack Rabbit said.

But alas, he stopped to think
Right there in the field
So the hunter fired his gun
And Jack Rabbit had to yield.

Then he saw right in the path,
Like a snowflake light,
A piece of poor Jack Rabbit's fur,
The tip of his tail that's white.

"Well, well! Such things will happen!"
Jack Rabbit said; said he,
"A little piece of me is gone,
But it's only the tip of me."

However, Jack Rabbit promised himself
No more of him should be caught.
He was every inch a rabbit,
And never should be bought.

But Jack Rabbit thought too long.
The hunter fired again.
The point of his ear this time was hit,
Poor little thing, what chance had it?

Jack Rabbit now grew wise. He rose,
And went inside his burrow.
And he said to himself "Jack Rabbit knows
The best place on earth is his burrow."

For now at last he understood
What his mother used to say:
"In the little corner where one was born
Grows the very best of hay."

*Une pensée de Lapinot*

Le soir Ting . . . Ling!
Le noir Ting . . . Ling!
La lune Ting . . . Ling!
La brise Ting . . . Ling!
V'là mes délices . . . Ling!

Maître Lapinot chantait cela un soir.
La lune brillait bien fort dans le drap bleu du ciel.
Lapinot regardait aussi les étoiles et les appelait doucement.
L'une d'elle, la première née de la Lune, l'entendit chanter.
—Je descends Lapinot! Je descends! encore un peu de patience et je serai à toi.
Lapinot continua à chanter en attendant la belle étoile.

Étoile d'or!
Du grand ciel pur!
Brille bien fort.
Dans l'ciel d'azur.

Et comme il s'arrêtait il vit la belle étoile près de lui, qui lui souriait et brillait.
Il grimpa sur elle . . . ils montèrent tous deux dans le bleu azuré du grand ciel austère!
Arrivée en face d'une autre étoile, elle attacha un bout de la corde et tenant l'autre dans un de ses bras . . . elle plaça Lapinot sur la corde.
Il se balança bien fort, Lapinot . . . si bien qu'il tomba.
Cette chute réveilla Lapinot et il se trouva installé dans l'herbe verte. Le soleil apparut à l'horizon! C'était le matin.
Lapinot s'était endormi en chantant.

Ting . . . Ling . . . Ting . . . Ling.
La lune brille.
L'étoile scintille
Le vent chante
Une romance
Ting . . . Ling . . . Ting . . . Ling.
Il avait rêvé.

*Lapinot's dream*

The night Ting . . . Ling!
The dark Ting . . . Ling!
The moon Ting . . . Ling!
The breeze Ting . . . Ling!
My delights these . . . Ling!

Master Lapinot the rabbit was singing this song one night.
The moon shone brightly in the dark blue curtain of the sky.
Lapinot saw the stars too, and called to them softly.
One of them, the first-born child of the moon, heard him singing.
"I am coming down, Lapinot! I am coming down! Have a little patience and I shall be with you."
Lapinot went on singing as he waited for the beautiful star.

Star of gold
In the great clear sky
Shine so bright
In the azure sky.

And as he stopped he saw the beautiful star near him, smiling and shining on him.
He jumped on her back and they went up both of them into the azure blue of the great solemn sky.
When they had reached a place opposite another star, she fastened the end of a cord to it, and tying the other end to one of her arms she put Lapinot on it.
Lapinot tried as hard as he could to balance himself—tried so hard he fell. And the fall woke him up for he found himself safe in the green grass. The sun was coming up on the horizon. It was morning.
Lapinot had fallen asleep singing

Ting! Ling! Ting! Ling!
The moon shines
The star twinkles
The wind sings
A romance
Ting! Ling! Ting! Ling!
He had been dreaming.

### *Yvonne*

Yvonne and her twin sister were prematurely born. The sister died from a malformation of the heart when a few days old. She weighed 3 kilos at birth. Yvonne weighed but 1½ kilos at birth, and her development has been greatly retarded in every respect. Moreover, she presents a special physical anomaly since her heart is located on the right side of her body and her liver on the left. She is somewhat odd in her appearance, too, her face being of a pronounced "hatchet" type.

She was first sent to school at the age of seven, and at that time could barely stand alone. The simple physical exercises in use at the school were impossible for her, since at every moment she was

in danger of losing her balance. Mlle. Carter, the Principal, advised her parents to withdraw the child and to keep her at home another year. This was done and the following year she entered, but accomplished nothing. She was placed at the foot of her class, and there she stayed, miserable, and often unoccupied for hours at a time. However, by dint of many special lessons and with very great difficulty she did learn to read. At nine years of age she entered the second-year class; here she made no progress, and it was evident she must repeat. So at ten years of age she was placed in my class among the children beginning their second year under the Decroly plan, children who were able-bodied and active.

Frightened and timid, in the beginning Yvonne was thoroughly bewildered. But her little classmates soon began to give evidence of sympathy for her, and happy not to be ignored, she began to gain confidence, and to participate to a slight extent in the activities going on about her.

I gave her a mental examination with the following results:

*Binet tests:*

Chronological age 10 Mental age 7 (barely)

VII passed 1, 3, 5
failed 2, 4 (test 4,—3 in place of 9)

VIII passed 4 (gave 15th as date in place of 14th)
failed 1, 2, 3, 5

*Decroly tests:*

*Pictures:*

Saw no connection between the pictures in a series, considered each as a separate story.

*Head measurements:*

Diam. frontal-occipital, 17.8 cm.
Diam. temporal, 13.3 cm.

*Dynamometer:*

Right hand 19 kg.
Left hand 10 kg.

The child experienced great difficulty in her reading, her spelling, and especially in her work in number. Her reasoning ability was poor and she found it difficult to concentrate. Little by little, however, she began to take interest in her work and to participate more and more in the activities of the class. Always very timid, very sensitive, but easily encouraged by a kind word, it was evident that she was making progress and beginning to develop mentally. During the third year of our experiment she continued in the class doing as much of the work as she was equal to. She improved greatly in spelling and began really to understand the work in number.

These signs of development became increasingly evident, and so at the end of the year, in spite of her retarded mental age, I promoted her to fourth grade with the rest of the class. And then a veritable transformation seemed to take place in her. She appeared to "wake up" and to change com-

pletely. Though never brilliant she began to take a really active part in the lessons and to follow the work of the class. Her spelling became pretty good, her work in observation equally so. In arithmetic, to be sure, while she made great progress, her performance was never very good.

When at the end of the year she was examined by the Vaney tests (3d degree, 4th school year), she scored 5.5 out of a possible 10 points, a very good showing for her.

Results of the Binet and Decroly tests given at the end of the fourth grade work were as follows:

*Binet tests:*

Chronological age 12 — Mental age 9.8

VIII all passed
IX all passed
X passed 1, 2, 3, 4
failed 5

*Decroly tests:*

*Practical judgment:* box with puzzle lock
succeeded in opening it after 6 minutes.
could not shut it completely, 7 minutes.

*Pictures:*

The fire: 20 sec. Very good.
The orange thieves: 25 sec. Very good.
The new hat: 55 sec. Very good.[1]

[1]The teacher's judgment charts Nos. V and VI shown in Appendix A present estimates of Yvonne's general development at the end of the second grade (her first year in the Decroly Class) and at the end of the fourth grade.

Yvonne began her work in the fifth grade, if not brilliantly at least in a thoroughly normal way. Unfortunately, at the end of November, 1920, she suffered a severe attack of albuminuria. As the grave nature of this trouble was not recognized at first, it was allowed to become serious. She suffered from convulsions and from coma lasting several days. She was able to recover, however, and to return to school about the end of March, when she took up her work again with evident profit.

It is not too much to say that this child's entire life has been changed by her experience in the Decroly class. How much further will she develop? Only the future can tell us.

# TYPE PROGRAMS

*. . . I have asked myself what are those things of which the child—all children, in Belgium, in Europe, in the whole world indeed—must not remain in ignorance? And at the same time I have asked myself what types of learning are most attractive to the child? . . . And in response to the first question, I believe we must say this; the knowledge most necessary to the child is, in the first place, knowledge of himself. . . .*

*After knowledge of himself follows logically that of the world about him, the environment in which he as a child finds himself.*

*But, you will say to me, that is a vast field, how are you able to reduce it to a program? The reply is quite simple. I consider the environment solely from the child's point of view, and I discard so far as possible, whatever does not relate directly to his life. In addition I proceed by general syntheses, very objective ones, that exemplify the chief activities of human and social life.*

*Thus it is the needs of the child that serve as a pivotal fact and all that society and nature, living and inanimate, supply for their satisfaction may be used as the subject matter of learning, in the measure, let it be said, in which the mind of the child is able to assimilate them.*

—OVIDE DECROLY, *Conferences at Anderlecht.*

# CHAPTER X

## TYPE PROGRAMS

In considering the following *type programs,* the reader will recognize that the general method of organization used permits the greatest flexibility as to details, at the same time that it preserves the essential features advocated by Dr. Decroly, primary concern with the fundamental human needs, and their presentation in terms of the child's world, through his own activities in *observation, association,* and *expression.* Thus in one sense these programs may be said to outline a prescribed course of study. At the same time they are, as their informal character shows, merely teacher's notes summarizing the actual ground covered in various periods of unequal length by classes of first, second, and third grade children. From them a clear idea may be gained of the way in which the subject matter program is developed in a Decroly Class; and they will be found to offer, too, some suggestions as to the methods of presentation used.

As has been previously stated,[1] the programs for the younger children are organized about several centers of interest during the year, while, since 1921, the work from the third grade upward has

[1] *See* p. 24.

been organized each year about a single center, any one of the *four fundamental needs* being selected.

*Organization of Programs by Multiple Centers*

A recent bulletin[1] published by the Brussel's Department of Education offers the following suggestions for centers of interest appropriate to the work of first and second grade classes. The centers italicized are those suggested for use in the first grade.

I

*I am hungry—I am thirsty*

Bodily organs concerned in eating and drinking

*Fruits of the Autumn.*
*Animals used for food.*
*Our meals.*
*Vegetables.*
*Bread.*
*Milk.*
*Eggs and meats.*
*Salt.*
*Beverages.*
Kitchen utensils.
Setting the table.
The chestnut and the walnut.
The apple and the pear.
The grape and the hazel nut.
The medlar and the quince.
The orange and the lemon.
The beef and the hog.
The rabbit and the chicken.
The duck and the goose.
The fish and the mussel.
The potato and the turnip.
The beet and the endive.
The carrot and the tomato.
The pea and the bean.
Cereals.
Sugar and cholocate.

*I breathe*

Bodily organs concerned in breathing
The air.

[1] *Methode Decroly, Programme,* Typographie et Lithographie E. Guyot, Brussels, 1922, pp. 42.

I bathe (I keep myself clean)
Making the toilet.

His family, his school, and the society in which he lives take care that the child shall be well fed, that he shall live in well-ventilated surroundings, that he shall be kept clean. And for this the child is grateful to his family, to his school, and to the society that is responsible for him.

## II

### *I am cold*

The bodily mechanism for feeling cold. What happens when we are cold, when a plant or an animal is cold?

*Snow and ice.*
*The wind and the rain.*
*The trees in winter.*
*Our clothing* (general consideration).
*Foot gear.*
*Head gear.*
*Different kinds of dwellings.*
*Our homes.*
*The habitations of animals, of savages.*
*Building materials.*
Jacket and breeches.
The dress and the waist.
The shirt and the sweater.
The stocking and the glove.
The overcoat and the rain coat.
Leather and fur.
Rubbers and umbrella.
Wool and cotton.
Silk and linen.
Stones and sand.
Brick and mortar.
Tile and slate.
Wood and iron (as building materials).
The bedroom and the kitchen.
The cellar and the attic.
Different methods of heating.
Coal and wood.

His family, his school, and the society in which he lives see that the child is protected from cold. They take care that he shall be well clothed, well sheltered, and well warmed, and for this the child is grateful to them.

## III

*I am afraid* (I defend myself)

What happens when we are frightened?

*Accidents and dangers in the house,* in the street, on the railroad, on waterways, in the country, etc.
*The jaws, teeth and claws of animals.*
*Animals that aid man to defend himself.*
*Methods of protection, of security, of defense*—in the house, in the street, on the water, on the railroads, etc.
Dangerous animals.
Dangerous plants.
The senses as means of protection.
Protection from illness.
Protection from fire.
The faults one must combat.
The police and the gendarmes.
The firemen and the scavengers.

His family, his school, society, protect the child from numerous dangers, and for this reason the child is grateful to them.

## IV

*I work*

How I work—The tools with which I work

*Use of the hand.*
*The strength of men and of animals.*
*Tools and machinery.*
*Gas, petroleum.*
*Kinds of work done out of doors.*
*Roads and highways.*
*Vehicles.*
Kinds of work done collectively.
Electricity, acetylene.
Rest after work. Sleep.
Recreations and games.
Festivals of the year.
The cart and the wheelbarrow.
Rivers and canals. The sea.
The boat and the airplane.
The train and the automobile.
The bicycle and the carriage.
The horse and the ass.

His family, his school, society, help the child in his work, and teach him how to work, and for this the child is grateful to them.

V

The sun (recapitulation)

Gives light and heat.
Causes the winds and the rain.
Causes the plants to grow and supply food to animals and men, and materials for the dwellings, clothing and fuel used by men.

The child loves the sun, without which there would be neither plants nor animals, without which he could not live.

In developing the program for any one year from these or similar centers of interest, the teacher aims at a selection that shall represent each of the child's fundamental needs, and shall at the same time take into account the resources offered by the changing seasons. The centers chosen and the length of time accorded to each will be further determined by the facilities of the particular school environment, by the interest of the children, and by their language development.

The following are examples of first and second year programs in which the several centers of interest have been selected from among those listed above.

FIRST YEAR

| *Months* | *Needs* | *Centers of Interest* |
|---|---|---|
| September | The child's needs | The child |
| October-November | I am hungry | Fruits |
| December | I play | St. Nicholas and his toys |

FIRST YEAR (*Continued*)

| *Months* | *Needs* | *Centers of Interest* |
|---|---|---|
| January-February | I am cold | Clothing |
| March-April | I am cold | Fire |
| May | | The flowers (incidental center of interest) |
| June | I work | The hand and the foot |
| July | | The sun (recapitulation) |

SECOND YEAR

| | | |
|---|---|---|
| September | The child's needs | The child |
| October-November | I am thirsty | Water |
| December-January | I am cold | Protection against cold |
| February-March | I am cold | Coal and wood |
| April-May | | Plants (incidental center of interest) |
| June | I work | Means of transportation |
| July | | The sun (recapitulation) |

The following examples will serve to suggest the kind of treatment by which the various centers of interest are developed into a detailed program.

FIRST YEAR

October-November — I am hungry — FRUITS

OBSERVATION — Common fruits—wild and cultivated fruits—fresh, dried, and preserved fruits.

*Measurement:* — Measures of comparison—number, shape, color, size, thickness, weight, taste, roughness of outside covering.

| | |
|---|---|
| | Comparison of fruits of the same kind, of different kinds. |
| | How fruits are sold—for how much? Different quantities having the same weight. Different prices. Grouping of fruits by 2, 4, 6, etc. Practice in number combinations using fruits as objects of direct perception. |
| | Buying of fruits at the market with the children—paying for them. Practice in class—buying, selling, paying. |
| ASSOCIATION | Use of fruits for food. Methods of preparing, of preserving, etc. Comparisons, classifications, syntheses. How fruits are gathered, shipped, sold, eaten. |
| *In space:* | Where fruits come from—stores, markets, the huckster's cart, orchards, foreign countries. |
| | Transportation of fruits. |
| *In time:* | Length of time fruit will last if kept in the classroom. Time needed to prepare a compote—to eat it. |
| ABSTRACT EXPRESSION | Sentences summarizing observations. Affixing labels to the various objects in the classroom (furniture, objects modeled in clay, etc.) |
| *Reading:* | Making of numerous games for reading that relate to the lessons in observation and result in rapid progress in reading vocabulary. |
| *Writing:* | Copying of written sentences—illustrating them by means of sketches. |

| | |
|---|---|
| CONCRETE EXPRESSION | |
| *Modeling:* | Modeling fruits in clay. |
| *Drawing:* | Drawings of fruits—of the class in the market—of the class making compote, etc. |
| *Manual work:* | Cutting out. Classification of pictures (fruits, dried, edible, etc.) |
| | Collective work by the class—sand table representations, the orchard, the market, the road to market (use of clay, of paper). |
| CONDUCT | Danger from swallowing seeds, nuts. |
| | Danger from green fruits—from over-eating of fruits. |

---

January-February — I am cold — CLOTHING

| | |
|---|---|
| OBSERVATION | My doll's clothing—underclothing. Linen. Wool. The sheep. |
| | Trades concerned in the making of clothing—of hats—of shoes. |
| | Furs. Furbearing animals. |
| *Measurement:* | Methods of comparing various articles of clothing and different materials—by cost, by durability, etc. |
| | In the making of clothing—taking of measurements, estimating of costs, etc. |
| | Estimating the number of chemises, of skirts, etc., to be cut from a given piece of goods. |
| | Use of the hand, the finger, the back of the hand in measuring. |

Problems relating to toys, to clothing.

Comparison of weight of raw wool and of wool after cleansing.

**ASSOCIATION**

Facts concerning clothing. Fashions. The care of clothing. How clothing is spoiled, destroyed.

Clothing worn by special persons—by special trades and professions.

Beings that need no clothing. What takes its place in the case of animals?—of plants? Beings that clothe themselves.

*In space:*

Clothing worn by people of foreign lands (from pictures and illustrations).

Where do we find sheep? The sheepfold? The sheep farm? Where does cotton come from? How is it transported?

Modes of dress in the city—in the country.

*In time:*

How we dress today. How our mothers dressed — o u r grandmothers. Historic dress.

Changes in clothing following the seasons. How long does clothing last?

**ABSTRACT EXPRESSION**

*Reading:*

Lotto games (dealing with clothing), Reconstruction of sentences cut up into words. Continued classifying of words in appropriate lists. Use of special color to set off the important syllables.

*Spelling:* Children compose their own dictation lessons.

*Composition:* Free work in writing sentences and illustrating them.

CONCRETE EXPRESSION

*Drawing:* Designs for clothing—Pictures of undergarments — over-garments—for boys—for girls—for winter—for summer—Clothing of olden times—of today.

*Manual work:* Cutting out and making of clothing (doll's size).

CONDUCT Care of one's clothing. Help for children of the poor who need clothing.

---

May — Incidental center of interest: THE FLOWERS

OBSERVATION

Flowers of the season—The plum—The pear—The cherry-tree (in the order of their flowering).

Gathering of flowers—classifying them according to the way they grow—on trees, on the ground—Those that come before the leaves, with the leaves, after the leaves.

Those that grow singly, in clusters. Classification according to their color, their form, the details of their structure.

According to their fruits, their perfume.

*Measurement:* Number of stamens, petals, sepals—In one flower, in several—Number of flowers on a plant—on several plants.

May flowers—range according to size.

How many flowers in a handful—In a vase. Size of the petals compared to size of a finger.

Classify by shape of petals. Circle, half-circle, etc. Compare with a square. Measure diameter, median. Which flowers are smaller than a finger, than the hand? Larger than a finger, a hand, an eye, the head? Compare the weight of flowers when fresh and dried. How many dried flowers does it take to equal a given weight of fresh flowers?

ASSOCIATION

How does man obtain flowers?—Work in the garden.—Use of flowers for festivals, dinners, gifts, funerals, in parades, the "Longchamp Fleuri" (annual flower fête of Brussels).

From what are artificial flowers made?—How does one dry flowers?—What do we do with the flowers in our gardens?—The flower market.

*In space:*

In what part of a garden do we place flowering plants? Trees?

Where do we place bouquets—the vases containing them? What does one do with wilted flowers? What becomes of them? Where is there a florist shop, a gardener?

Stores that sell flowers—wreaths.

What kinds of flowers are used for flower-beds, borders, public parks and gardens, cemeteries, shrubbery?

*In time:*

Appearance of the first flowers, the last.—How long do flowers bloom?

—Flowers blooming today.—How long have they been selling flowers in the street?

ABSTRACT EXPRESSION

*Vocabulary:* Odor—Odorous — Odorless—Scent —Perfume, etc.—Color—Colorless —Pale—Multicolored — Variegated —Tinted.

*Reading:* Little stories relating to the center of interest. Stories from a reader.

*Spelling:* Résumé of observations made—dictation. Plural of names. Exercises, games.

CONCRETE EXPRESSION

*Drawing:* Flowers — Different parts of a flower.—Trees in flower.—A garden.—A flower-girl.—Picking flowers.—Mamma's birthday.

*Manual work:* Gardening.—Making artificial flowers.—Making a flower market.—A florist shop.

CONDUCT Benefits from flowers. — Food, Beauty, Industries — Pleasure to man.

How to pick flowers.—Care required by flowers.—How the child should treat flowers.

---

June — I work — THE HAND AND THE FOOT

OBSERVATION Comparison of the hand and the foot—resemblances, differences. Action of the hand by itself—of hand and arm together—of the two hands —action involving the body.

Action of the foot. Its particular importance to the child.

The hand of the child. Parts of the hand—of the foot. Why do we have two hands?—two feet? Objects made to be grasped by the hand. Objects adapted to use by the foot. Tools for manual use. Tools that can be used by foot power, or with the aid of foot power.

Usefulness of the hands, of the feet.

*Measurement:* Comparisons—the hand compared with the foot. Size, dimensions, length, thickness. Fatigability, strength, firmness. Sensitivity—to tickling, to fire, to cold water.

Races—who can run fastest?—Who can throw furthest?—with the right hand? the left? How many hands high are the various members of the class? The hand as a unit of surface measure. How many nails on each hand? Comparison of both hands by volume, by surface. Number of fingers, of toes, of phalanges, of hands, of feet (problems invented by the children).

ASSOCIATION Manual work. Professions requiring use of the hand. Games depending on the use of the hand. Games depending on the use of the foot. Protection of the hand, of the foot.

*In space:* Location of stores that sell products of manual work (in your district of the city).

Shoemakers, glove-makers.

Sand-table plans showing neighborhood, district of the city. Maps drawn on the floor.

*In time:* Amount of time needed for various activities. How long does it take to wash one's hands?—one's feet?—to put on one's gloves?—one's shoes? How long can one keep a hand raised? stand on one foot? keep one's hand perfectly still? one's foot? Need of balance.

ABSTRACT EXPRESSION

*Reading:* Use of *Imagier de l'Enfance* or other simple reading book. Search for little stories relating to the center of interest.

*Recitation:* Committing to memory "La Main" (Aicard and Rouma).

*Spelling:* Daily practice by dictation or little stories composed by the children.

*Vocabulary & discussions:* Grouping and illustration of words containing like syllables. Exercises in singular, plural, masculine and feminine forms. Use of games for review purposes.

Free work in *composition.*

CONCRETE EXPRESSION

*Drawing:* Drawings of the hand and of the foot. Of scenes experienced—children hammering, digging, raking, modeling, etc., walking, running, climbing, sitting, etc.

*Modeling:* Model the hand and the foot—various tools, the hammer, the broom, etc.

*Manual work:* Sewing, knitting, etc.

CONDUCT — Care of the hands—of the nails. Care in handling fire, glass, knives. Care of the feet—in their use, protection from cold, from wet. Care of the shoes, of gloves.

---

SECOND YEAR

October-November — I am thirsty — WATER

OBSERVATION — Where water comes from. Comparison with other liquids, with milk—oil—wine. How they are produced. How they compare—in taste, color, odor, transparency.

Heating of water—boiling, evaporation, diffusion. Density of water. Effect of water on other substances—penetrating, dissolving, softening, making heavier, discoloring.

*Measurement:* Exercises in comparison dealing with weight, volume, time, surface. How much water does one drink in a day? in a week? etc.

How long does it take to drink a glass of water? To fill a pail? to empty a pail? to melt a piece of ice? How many glasses are there in a pitcher? in a bottle? How many pitchersful in a pailful?

Spill a glass of water on the table, how large a surface will be covered by the contents? Try the same experiment with a glass of sand, of earth, of rice.

Compare the weight of water with the weight of sand, with the weight of ice, with that of other substances.

| | |
|---|---|
| ASSOCIATION | Benefits of water. Dangers, and how they can be remedied. Aquatic animals. Trades and professions that have to do with water. Water, the drink of plants, of animals, and of men. Form in which water is present in the body—tears, urine, sweat.<br><br>How water is obtained in houses—pumps — water-taps — wells—cisterns — pipes — water-works. How water is carried from the reservoir to the child's house. Dangers from too much water. Dampness in the house. How water can be conserved. |
| *In space:* | Springs, where found?—What becomes of the water in a spring? Where does it flow to? Where does it come from? |
| *In time:* | The day, the hour, the seasons. When it is most likely to rain—How long since it has rained? |
| EXPRESSION, abstract and concrete: | Reading—Grammar—Spelling. Manual work. |
| CONDUCT and HYGIENE | How and why we bathe—Care of the teeth—Keeping the feet dry—dangers from wet feet. One should not drink when heated. Drowning. |

| February-March | I am cold | COAL AND WOOD |
|---|---|---|
| OBSERVATION | Comparison of coal and wood—color—texture—porosity (shown by action of water)—weight—effect of friction—of blows—action of fire—splintering—hardness—resiliency. | |

[1]*Determinism:* Why do we use wood to start the fire, coal to keep it going? Why is coal black? How does coal burn?

Wood? Why are stoves made of sheet-iron? of cast iron? Use of fire-proof brick inside the stove. Why not build chimneys going down into the ground? Methods of regulating the stove (draughts—ventilation).

Transformation of wood into coal. Where does coal come from?

Why is coal kept in the cellar?

When do we put in our supply of coal? Why?

What kind of coal do we use in the school-house? At home? Why is it different?

Need of artificial heat.

*Measurement:* Classify various substances according to points noted under *Observation,* degree of hardness, porosity, etc.

Comparison of the relative amount of work required when coal and wood are used.

How many hods of coal are used in the school-room each day? each week? each month? (in cold weather? in warm weather?) in all the class-rooms? at home?

How many sticks of wood does it take to start the fire? How many

[1]Much of the subject matter included under "Determinism" (essential characteristics) and "Technology" is adapted to work in Observation, much of it properly belongs to the work in Association. It appears in these programs under both classifications.—Ed.

do we use in a day, in a week? etc. How many shovelsful of coal in a hod? How many shovelsful will the stove hold? How many hods of coal in a sackful?

How many sacks of coal in the cellar?

How many wagon loads of coal does the school consume in a year? For how long every year do we have fires at school? How many pounds does a hod of wood weigh? a hod of coal? Price of wood, of coal?—Comparison with price of other commodities (food, clothing, etc.).

Which will be more quickly consumed, an equal amount of coal or of wood?

ASSOCIATION

Coal and wood from their origin to their consumption—Source of wood—Firewood—Formation of coal—Production of coal—The coal mine—Different kinds of coal.

Kinds of work and trades related to the production of artificial heat.

Different kinds of stoves in our houses—for cooking—for heating—the brasier—the footwarmer—Of what are they made? Different systems of heating.

Uses of wood—hard wood—white wood—resinous—exotic rare woods.

*In space:*

Coal yards—Lumber yards—Stores that sell wood and coal. Where do we buy our coal?—our wood? Stores where they sell wooden ware—furniture.

Rooms in which we make fires.

*In time:* Length of time needed for various activities; putting a shovelful of coal on the fire—consuming a hod of coal—filling and emptying a hod of coal. How much time does the janitor need to light the fires in the morning?—to dump them? to lay them? At what hour does he get up in the morning? During how many months of the year does he keep the fires going? How many days do we have heat? How many hours a day do we have heat?

How long does a match burn?

ABSTRACT EXPRESSION

Free work in composition.

Dictation exercises — Grammar games related to the center of interest.

*Vocabulary:* Wooden—wooded—forest—glade—verge (of the wood)—timber—timber trees—dry wood—green wood—hard wood—soft wood—rotten—finish—polish.

Coal—collier—colliery—coal-mine. "Black as coal," etc.

CONCRETE EXPRESSION

*Drawing:* Drawings of the wood-cutter—of the janitor—chopping wood, lighting fires, putting on coal, etc. A cold day—the children warming themselves at the class-room stove. The stove at home. Free work.

*Manual work:* Construct a fireplace of bricks in the garden and make a fire in it.

Cut little billets of wood (by measure).

Cut shavings for tinder (to take the place of paper).

CONDUCT AND HYGIENE

Dangers to which miners are exposed.

Precautions to be taken against fire —asphyxiation.

---

April-May

Incidental center of interest. PLANTS IN SPRINGTIME

OBSERVATION

Germination of seeds.—Effects of light—of air—of moisture. Circulation of the sap. Budding. Appearance of plants. Roots.—Stems. —Buds. Anatomy of plants.

*Measurement:* Height of stems compared with each other—compared with oneself —with a finger—an arm's length—one's whole height—height of the class-room. Thickness of stems measured by one's hands.

Compare the resistance of stems to bending — breaking — scratching —blows.

How many buds—how many leaves on one side of a stem?

How old is a branch? Compare a dry branch with a green one. Compare the length of leaves.

Comparison of stems in regard to: gloss (the cabbage), toughness (the mallow), hairyness (the myosotis), prickliness (viperine), downiness (mullen), thorniness (gooseberry), spininess (plum), glabrousness (pea).

Resistance to the wind—the rose-bush, the oak-tree.

ASSOCIATION — Uses made of woods from different trees (building, joinery, cabinet work). Things made of wood in the house—in the street.

Trades that work with wood.
Tools that help man to cultivate the ground.

*In space:* — Plants we get from the Congo.
Where are wooden utensils kept in the kitchen—why?

Where do we keep wood in our houses?

Where do we find such and such trees in the garden?

Where are certain trees planted?
Where is there a wood yard?

*In time:* — Comparison of length of life of a pencil—a chair, etc., with the life of a child.

How long since the trees began to bud — those most advanced — the latest ones? How many months since certain flowers have bloomed? since certain fruits have ripened?

*Determinism:* — Essential characteristics of trees and plants. Why does a tree die? Why are leaves green? Why have flowers such bright colors? Why are seeds put in the ground to sprout? Why are buds scaly? Why is it that plants do not walk?
Essential characteristics of furniture—construction—shape—color.

*Technology:* — Roots used as food—as medicine—in industry?

Stems used as food—as medicine—in industry?

Leaves used as food—as medicine—in industry?

Flowers used as food—as medicine—in industry?

Fruits used as food—as medicine—in industry?

Seeds used as food—as medicine—in industry?

ABSTRACT EXPRESSION

*Vocabulary:* Parts of the plant—twig—branch—bough—leaf—foliage—etc.

*Grammar:* Adjectives—games using adjectives—exercises in conjugation in the form of games.

CONCRETE EXPRESSION

*Drawing:* The spring in different places. Leaves in decoration.

*Manual work:* Clay work, cutting, work in cardboard, in wood (furniture). Group projects—a forest, a vegetable garden—an orchard.

CONDUCT Why we should care for plants and protect plant life. Practical examples.

---

July THE SUN

OBSERVATION Light—its transmission. Shadow. Heat. Expansion.

Position of the sun at different time of day.

*Measurement:* Measurement of shadows. Length of a shadow projected by a certain object at different time of day. Notations—graphs.

ASSOCIATION Meteorological phenomena — the rainbow—the dawn—twilight.

Work and trades done by daylight, at night.

Effect of the sun on human beings —on sickness—on health. The sun and uncivilized peoples.

Harm done by the sun (drought). How remedied?

The compass.

*In space:* The sun in hot countries—how people protect themselves against it—the parasol — the fan — water — white clothing.

Vegetation in hot countries.

Characteristics of sunny places—of shady ones.

*In time:* The hot season.—Since when has it been hot? How many months of the year are hot? How many months in one season of the year? Making of a calendar.

*Determinism:* Waking and sleeping.—Why do we work by day and sleep at night?

Color of clothing. Why do people wear colored clothing in temperate climates? Why do they wear white in hot and cold countries?

Why is it warm in summer, cold in winter?

Why do day and night follow each other with such regularity? Why

| | |
|---|---|
| | are the days long in summer, short in winter? |
| *Technology:* | Uses of mirrors: for making the toilet, in ornament, as reflectors (lanterns on vehicles). |
| | Hot air—cold air—applications in industry. Winds. |
| | Shutters—awnings—the parasol. |
| ABSTRACT EXPRESSION | |
| *Vocabulary:* | Color, shade, tint, clear, clouded, limpid, transparent, opaque, translucent, somber, gloomy, brilliant, sparkling, scintillating, gleaming, glittering, flashing, resplendent glimmering, penumbra, dim, dull, beaming, etc. |
| *Reading and Dictation:* | Daily exercises. Free work in composition—discussions. |
| *Grammar:* | Singular, plural, masculine and feminine forms—games for practice. |
| CONCRETE EXPRESSION | |
| *Cutting and Modeling:* | The school garden today. |
| *Drawing:* | Light, darkness, summer, winter—summer landscape — winter landscape—the city by day—the city by night. |
| CONDUCT | Precautions to be taken against extreme heat and direct rays of the sun. What to do in case of sunstroke. What is the best drink to quench thirst? |

L'ENFANT
SES BESOINS
SON MILIEU
BESOIN DE SE NOURRIR
BESOIN DE SE PRÉMUNIR CONTRE LES INTEMPÉRIES
BESOIN DE SE DÉFENDRE CONTRE LES MALADIES DIVERSES
BESOIN D'UN TRAVAIL SOUCIAIREMENT

Fig. 7.—Review chart planned and executed by children of a third-grade Decroly Class, summarizing the subject matter program of an entire year. The four fundamental needs of the child are here developed in relation to the program of health education initiated in the schools of Belgium by the C. R. B. Educational Foundation. This chart is now in the possession of Miss Mabel C. Bragg, Assistant Superintendent of Schools in Newtonville, Massachusetts, having been presented to her during her stay in Brussels in 1923.

### *Organization of Programs by Single Centers of Interest*

In the two following examples the subject matter program for an entire year has been organized about a single center of interest. Each is a résumé in outline of the ground covered by a class of third-grade children. The sequence in which these single centers of interest may be considered is immaterial, but the treatment of any one of them will vary according to the maturity of the children. The program dealing with "Defense against enemies and dangers" is, perhaps the most difficult one to present effectively, and for that reason might preferably be selected for fourth-grade work or even deferred until later in schools using the Decroly program for older pupils.[1]

As has been described in a previous chapter, the fourth-grade children begin to assume responsibility for the development of their own program, which thus becomes a consciously co-operative undertaking on the part of teacher and pupils.[2]

#### The Need to Work

**Recapitulation**

The need to eat and drink, to be cleanly, to have clothing and a dwelling, to make use of fire.
The need for stock-raising, for cultivating the soil.

[1] It will be recalled that while the experiment in the Brussels' public schools has been limited to the first four elementary grades, Dr. Decroly's own school in the rue de l'Ermitage includes children of every grade from kindergarten to High School.

[2] *See* Chapter VIII, pp. 109 to 114.

The need for the manufacture of cloth and of clothing, of toilet articles.

The need for the building of shelters, of quarrying and mining for the materials of construction, for the manufacture of furniture.

The need for combustibles, for arms, for the divers means of defense and protection against disease.

The manufacture of tools and machinery for work-shops, factories, and studios.

The need for routes and the means of transport.

Need for the means of communication, of speech, writing, etc., etc.

All these demand the employment of organs of movement and prehension, adjustments of different parts of the body, changes in position, etc.

They demand also the manufacture and assembling of machines; the domestication of animals; the conversion of materials of animal, vegetable, and mineral origins; the construction and maintenance of roads, canals, rivers, ports; the construction of innumerable vehicles for land, water and air routes.

### *I. The Movements of Human Beings*

OBSERVATION

A. *Various movements* of the hand, the wrist, the arm, the shoulder, the trunk, the legs, the feet, the neck, the face, the eyes, the tongue, etc.

Movements involving the bones.

Movements not involving the bones.

The principal bones and joints.

The muscles. Principal muscles used in movements involving the bones. The various kinds of lever represented. Demonstrate.

The strength of the muscles. Demonstration with bags of sand or stones, or with a steel-yard or a cord and pulley.

Rapidity of movement. Demonstrate.
Rhythm of movement. Demonstrate—following of a given rhythm, seen or heard.
Precision of movement. Demonstrate—throwing a ball into an aperture.
Balance. Demonstrate.
Dexterity. Demonstrate in various ways—holding a stick vertically at arm's length, making a "wind-mill" with a cane held in the hand.
The excitation of movements—Demonstrate.
Effects of practice on rapidity and precision of movement. Demonstrate.
Muscular fatigue. Demonstrate—running, standing jump, jumping on one foot, bending, holding the arms outstretched with, or without supporting an object; raising a sack weighing 10 kilos a certain number of times, using the arms, the shoulders, the trunk, the leg, etc., also these parts in combination; opening a package as quickly as possible, doing up a package; classifying cards, other objects, as quickly as possible; carrying a glass or other container of water without spilling it; carrying an object on the head, on the shoulder, etc.

B. *Movements of the hand in working.*—The hand as a perfect tool.
Bones and muscles of the hand (from diagrams).
Different degrees of flexion and extension. Demonstrate.
Special movements of the thumb, the index finger.
Special movements of the hand (by itself) : pinching, grasping, scratching, snatching, digging, squeezing, pressing, pushing, smoothing, rubbing, twisting, breaking, bending, stretching, pulling, drawing, rolling, etc., etc.
Movements of the hand with the help of the arm (same but stronger).
Movements of the hand with the help of the shoulder (same, also lifting, lowering, leaning, spinning, kneading, twisting, crushing, carrying).

Movements of the hand with the help of the trunk.
Movements of the hand with the help of the legs.
Work requiring two hands.

C. *Movements required by various actions of daily life.*
Dressing oneself, bathing, drying oneself, walking, etc., etc.

D. *Movements of the hands and parts of the body demanded by various trades.* (Observe at home, on trips, etc., and imitate.)
The cook and the laundress—cutting, pouring, sprinkling, strewing, chopping, scouring, rubbing, wringing, spreading, dipping.
The baker, the pastry-cook—kneading, flouring, rolling out, putting in the oven, etc.
The laborer, the sower, the harvester.
The gardener, the cowherd, the veterinary, the merchant.
The spinner, the weaver, the tailor, the dressmaker.
The butcher, the tanner.
The smith, the lock-smith, the mechanic.
The wood-cutter, the carpenter, the cabinet-maker, the joiner.
Grouping of occupations in accordance with the movements they demand—in accordance with the amount of strength they require.

E. *Movements demanded by various kinds of games.*
Games played without equipment. With equipment.
Individual and group games.
Sports and physical exercises.

ASSOCIATION IN SPACE

Trades and occupations in other countries—
In the Congo
In China.

ASSOCIATION IN TIME

Trades and occupations of long ago.

*II. The Movements of Animals*

OBSERVATION

Observation of animals in the class-room (insects, birds, frogs, the dog, the cat, etc.), in the street, in the country (horses, cows, etc.).
Comparison of their movements with those of men.
Observation and recall of movements made when seizing with the mouth, the beak, the paws, the wings, etc.
Observation and recall of movements made in feeding (parts of the animal involved in these movements). Differences between the cat and the dog, the mouse and the rabbit, the perch and the frog, etc.—birds, fishes, insects.
Movements made by the animal when protecting itself against cold.
Movements made in attacking and defending itself.
Movements made in caring for young.
Movements made in serving their group.
Movements made in play.

ASSOCIATION IN SPACE

Above points discussed in relation to the animals of foreign lands. (Special study of fauna of the Congo for Belgian children.)

*III. The Work of Animals for Man and with Man*

OBSERVATION

In our country today.
The animals that aid man in his work: the horse, the ass, the ox, the mule, the dog, etc. (Review of foods, shelter, defence.)
Aid in agriculture—sowing, fertilizing, harvesting, threshing, grinding, etc.

Aid in care of other animals—the dog for herding sheep, etc.
Aid in transportation—the horse, mule, ass, etc.
Aid in manufacture—use of dogs in making butter, etc.
Animals that aid man in his sports, recreations and amusements.
Utilization of animal products to aid man's work—fat, bone, horns, hides, hair, hoofs for making tools, machinery, straps, thongs, saddles, grease, etc.

ASSOCIATION IN SPACE

Today in other lands.
Animals in the country that aid people in the cities —Animals in cities that aid country people—Animals that aid people at sea.
In cold countries—among the Laplanders—the reindeer, dogs.
In warm countries—the elephant, camel, dromedary, zebra, llama, etc.
In the mountains—among the Swiss—the mule.
At the seaside.

ASSOCIATION IN TIME

In former days animals were much more used than today—why?
Animals among primitive peoples—the Babylonians, the Phœnicians, Egyptians, Greeks, Romans, Gauls, etc.

### *IV. Man's Work for the Animals*

OBSERVATION

In our country today.
Raising of animals—horses, cows, dogs, etc.
Buildings for the protection of animals—stables, kennels.
Construction of highways.
Work of the veterinary, veterinary schools.
Hospitals for animals, cemeteries, the pound.

Schools of agriculture—courses in farming, stock-raising, poultry and bee-keeping.
Trades related to the care and raising of animals—cowherd, shepherd, groom, dog-fancier.

ASSOCIATION IN SPACE

Animal raising in other countries today.
In the various countries of Europe.
In the Congo.
In cold countries.
In hot countries—raising and training of elephants, ostriches, camels, etc.

ASSOCIATION IN TIME

Animal raising in olden days—by primitive man, the Babylonians, etc.

*V. Movement in Plants*

OBSERVATION

In general movement in plants very slow.
Stationary plants and those free to change their places.
Movements involving parts of the plant—the buds, leaves, flowers, roots, tendrils, parts of flowers.
Influence of light, of heat, of moisture—observations and experiments.

ASSOCIATION IN SPACE

Movements of plants in other lands.

*VI. Plants that Aid Man in His Work*

(Develop as III above.)

*VII. Man's Work in Aid of Plants*

(Develop as IV above.)

*VIII. Movement in the Mineral World*

*Movement in air*—wind, tempests, squalls, tornadoes, cyclones (see program on Defense against dangers).

Prevailing winds and their effects on temperature, on rainfall, on health, etc. Velocity of the wind.

*Movement in water*—Watercourses, rainfall, avalanches, freezing, glaciers.

Effects of movement of water.

Movement of streams toward the sea.

Evaporation, clouds, rain.

Sources of water supply—for cities, the house, the street, the reservoir.

*Movement in rocks*—by weathering, by the action of water, by avalanches, landslides, earthquakes, volcanic eruptions, etc.

By crystallization, by solubility, by melting.

By changes in the shore-line in various places, changes in the banks of streams.

*IX. How the Mineral World Aids Man in His Work*

*The air*—wind and wind-mills.

Health giving air currents. (See program on Defense, also program on Food.)

Uses in transportation.

*The water*—use in the mills, "white fuel," water power from streams, from tides.

Breaking of rocks by water power, erosion.

Erosion of the soil. Action of frost.

Uses in transportation.

*The rocks*—fuel from coal, oil, etc.

Material for tools, machines, etc.

Material used in roads, bridges, other means of communication and transportation.

*X. Man's Work for the Mineral World*

Always in his own interests

Prevention of floods by conservation of forests (See program on Defense).

Conservation of spots of interest and natural beauty.

Work of prospecting, locating, "striking" (water, oil).
Work of shipping, conveying (water, oil).
Work of extracting (metals from their ores), refining.
Work of quarrying, mining, drilling, etc.
Trades and professions depending on minerals
Water supply companies, hydraulic engineers, mining and civil engineers, bridge engineers.
Drillers, well-sinkers, pavers, millers, etc.

## Part II

### *I. Work of the Family and the Child*

Observation

The child's family and their work for the child
Work of the mother—at home, outside the home (review).
Work of the father—at home, outside the home (review).
People who assist the father and mother.
Brothers and sisters.
Comparisons of different families.
Difficulties that parents must overcome.
Work of the child for his family
For his parents, for his brothers and sisters, for others in the household. How can the child aid?
Comparison of the kind of aid given by children in homes of different types.—The poor child helps his family much more than does the rich child.—How?
A visit to the poorer quarters of the city.
Reports from the children as to how they help in their own homes.

Association in Space—

The family in foreign lands.

Association in Time

The family in old times.

### *II. Work of Society and the Child*

*The division of labor*—co-operation in work—comparison with parts of the body.
*Work done collectively*—in groups, gangs.
*Work done individually*—by separate processes.
Trades that supply foods, beverages.
Stock-raising, farming, fishing, manufacturing of foods (recapitulation).
Trades that supply shelter, clothing (recapitulation).
Trades and professions that aid in our defense against dangers, ill-health and other enemies.
Trades and professions related to city, state, or national government.
Trades and professions related to commerce, to transportation, to communication—post-office, telegraph, telephone, etc.
Chart of the various trades showing their reciprocal relations.
Production of raw materials:
Farmer, stock-raiser, gardener, lumberman, quarryman, miner, etc.
Transportation of raw products:
Drivers, wagoners, draymen, locomotive engineers, brakemen, seamen, sailors, ferrymen, etc.
Industries of conversion, transforming and manufacturing:
Makers of canned goods, dairymen, cheese manufacturers, brewers, etc.
Spinning and weaving mills, clothiers, etc.
Lime-burners, plasterers, brick-layers, cement-makers, etc.
Industries using wood—saw-mills, furniture makers, etc.
Industries using iron—foundries, etc.
Industries using copper, lead, zinc, etc.
Industries using dyes.
Industries for tool making, machine making.

Distribution of manufactured articles
Wholesale merchants, retail merchants, purchasers, traveling salesmen, peddlers.
Ship owners, shipping companies, moving agents.
The warehouse, store, show-window, show-counter, salesroom.
Household industries and trades of small production or direct consumption—restaurant keepers, etc.
Trades and professions that supplement each other—
The cashier, the accountant.
The post-office, telegraph, telephone, etc.
Trades and professions of superintendence and management—
Administrative and liberal professions.

### *III. Work of the School and the Child*

OBSERVATION

*The school's work for the child*

People who work for the child at school.
The school-master or mistress—their work during and after school.
The principal, or head-master—his work, his powers.
The janitor and his assistants.
The Bureau of Education.
The Superintendent of Public Instruction.
The local boards of education.

*Work of the child in school*

Schools to which the child may go later—at what age? Visit them if possible—What does one learn there?
The kindergartens from which the children have come (idem).
Other schools of the city—professional, industrial, secondary, schools of fine arts, schools for grown people—age requirements and terms of admission, number of pupils, etc.

ASSOCIATION IN SPACE

*Other schools of the province,* of the nation—Professional, industrial, secondary, schools of fine arts, academies, universities, normal schools, colleges, etc.

Make a chart giving the number of these, number of pupils in each compared with the entire school population—age of entrance, average age of graduation, conditions of entrance.

*Schools of other countries*—the Congo—India—China.

ASSOCIATION IN TIME

*Schools of olden times*

Education among primitive peoples—among the Babylonians, Egyptians, Greeks, Romans, etc.

When were the schools of your city started? Your school?

DEFENSE AGAINST ENEMIES AND DANGERS

When beginning this program, the teacher should arrange to procure a variety of living creatures that can be kept where the children may observe them constantly. The following list of suitable varieties easily obtainable in any locality may afford suggestions to the novice:

Molluscs, crustacea, fresh water annelids, different kinds of larvae, caterpillars of different varieties, carabs, diver beetles, water beetles, earwigs, wood-lice, ants, bees, wasps, centipedes, spiders, flies, mosquitoes, fleas, lice, sparrows, chickens, ducks, dogs, cats, rabbits, guinea pigs, etc.

Also the cow, horse, goat, donkey, sheep, pig, mouse, rat, hedgehog, shrew-mouse, bat, etc.

Animals that are frequently encountered in the vicinity of the school should also be used for purposes of observation. As for plants, the children's walks in the country will permit them to become acquainted with those varieties that constitute a menace to men and animals in various ways, plants that are poisonous, stinging, noxious, parasitic, the yeasts, fungi, mushrooms, etc.

FIRST MONTH—Means of defense

*The Child's means of defense:* Crying, nails, teeth, blows, use of implements for dealing blows, throwing things, remaining motionless, hiding, running away.

Protection afforded by special organs, the eye, ear, nose.

*Means of defense used by animals and plants:* Observation and investigation of their behavior and methods when defending themselves.

Means similar to those of the child.

Protection afforded by thickness of skin, by scales, horns, etc.

Protection by coloration, by camouflage (mimetism).

Defense by means of mandibles, claws, tentacles, the tail, the nose (trunk), the entire body (as in snakes).

Defense by venom, stings—simple and poisonous.

Defense by malodorous secretions, by secretions that cloud the surrounding waters, by immobility, feigning death, etc.

Similar methods employed by plants.

*Means of defense employed by men,* isolated and in social groups, observation and investigation of their methods of defending themselves and their property.

Fences, gratings, doors with locks, bolts, latticed windows, strong boxes, etc.

Police, constables, night watchmen, police courts, prisons, firemen, etc.

The army and navy.

SECOND AND THIRD MONTH—Defense and the animals[1]

*How animals defend themselves:* Classification of animals according to their means of defending themselves.—This may be done in relation to a very simple zoological classification, i.e., the families to which belong the earthworm, mussel, shrimp, fly, butterfly, cockchafer, June-bug, bee, ant, fish, frog, lizard, snake, sparrow, chicken, rabbit, cow, horse, dog, cat, monkey.

Further observations will be found necessary on the animals considered in less detail during the previous month.

*How animals endanger men:* the protozoa and coelentera, parasites, poisonous molluscs, the crustacea, insects (parasitic, noxious, hurtful, dangerous, etc.), the fishes, amphibians and reptiles, the birds, the mammals. Classification according to the kind of danger to be apprehended from each.

*How animals endanger each other:*

*How animals endanger plants:*

*Man's means of defense against the animals:* Hunting, fishing, trapping, etc.; the struggle against the fly, the mosquito; precautions to be taken against vermin, parasites, etc.

*How animals aid man to defend himself:* special study of one of several animals as occasion may offer. For example: comparison of the dog and the cat, of the dog and the horse, of the bat and the warbler (if possible), of the hedgehog and the mole.

---

[1]As our study proceeds we note particularly the various ways in which the child is aided to defend himself by plants, animals, the mineral world, and by man (his family, school, society). Opportunity for observations of this kind will vary with the character of the school environment and the resources it affords.

*How animals aid other animals and plants to defend themselves:* This part of the study is especially well adapted to exercises in association for children already accustomed to the Decroly program and the methods of its development.

*How man aids the animals to defend themselves,* protecting them against death, capture, sickness, accidents.

Measures taken against cruelty to dogs (dogs seen in the streets carrying loads, in harness).

Measures taken against cruelty to horses ( manner of harnessing, protective collars, etc.).

Against cruelty to cattle, both beasts of burden and beasts for slaughter.

Measures for the protection of birds (game laws).

FOURTH AND FIFTH MONTH—Defense and the mineral world—stones, water, gas, etc.

*Dangers to man in the mineral world:* Water—inundations, the bore of the estuary; snow—avalanches; fire—conflagrations; railway accidents, explosions, earthquakes, volcanic action, etc.

*Means of defense against dangers in the mineral world*: dikes, barrages (against avalanches), bridges, etc.

*How the mineral world aids man to defend himself:* armor, arms, munitions, fortresses, traps, fences, etc.

*How the mineral world aids plants and animals to defend themselves:*

*Man's aid to the mineral world:* reinforcing of mountain sides, etc.

SIXTH AND SEVENTH MONTH—Defense and the vegetable world.

*How plants defend themselves:* classification of plants according to their means of defense: odor, taste, thorns, bark, sap, etc.

*How plants endanger man:* poisonous plants, plants with dangerous thorns and spines, plants as sources of infection.

*How plants endanger animals:*
*How plants endanger other plants:* parasites, fungus growths, use as poisons.
*How man defends himself against plants:*
*How plants aid man to defend himself:*
Against animals—arrows, snares, poisons, bait.
Against other plants—parasites, fungus growths, use as poisons, use of wooden tools for weeding out noxious plants.
Against the mineral world—wooden dikes, barrages, bridges.
*How plants aid other plants and animals to defend themselves:*
*How man helps to defend the plants:* getting rid of noxious weeds, of parasites, combatting pests, protecting against drought, heat, cold.

EIGHTH AND NINTH MONTH—How society defends itself; family, school, community.
*Moral and social dangers*—faults of children—malefactors.
*How the family aids:*
*Aid of the school:*
*Aid of the community*—police, gendarmes, firemen, department of health, the prisons, courts, hospitals.

END OF THE NINTH MONTH—Defense and the sun, the stars.
*The sun's aid:* dangers of the night, of darkness; importance of light to permit recognition of dangers and enemies; action of the sun, sun-cures in certain maladies, etc.

TENTH MONTH
*Recapitulation*—syntheses by means of charts, graphs, and drawings, etc.

### *Outline for the Preparation of Lessons*

Each point included in a program is thoroughly studied. Dr. Decroly's outline for the preparation

of lessons[1] is followed to develop the possibilities of the subject matter and secure effective presentation. By its use teacher and children become accustomed to consider any topic proposed for study in the light of

1. The general ideas to be gained from it.
2. The methods by which these can be presented.
3. Activities in which the children may engage.
4. Incidental mechanical processes, including the acquisition of necessary techniques.

Mlle. Descordes, teacher in the school of the rue de l'Ermitage, has kindly supplied some examples of her notes, prepared in collaboration with Dr. Decroly, and from them the following may be selected to illustrate the use of this outline and the way in which our programs are built up with reference to it. Only notes on the lessons in Observation are given, but the reader will understand that under the same centers—*Fire,* and *Protection against cold and the animals*—lessons in Association and in Expression were similarly "prepared."

### Fire

(Teacher's notes on the preparation of lessons)

Observation

*General ideas:* Production of fire. How substances burn. Conductors of heat, good and bad.

[1] *See* Chapter III, p. 30, and Chapter VII, p. 114.

Radiation. Heat and vegetation. Liquids that burn; ether, naphtha, alcohol.

*Methods of presentation:* Rods of glass, of metal wire, which take longer to heat? Live coals placed on a bed of sand, on one's hand, on a metal plate. Visit to the fire-engine house. Pitchers of boiling water covered with linen cloth, with woolen cloth, with cotton cloth—speed with which each cool. Radiation of heat—thermometer placed near a heated body. Lighted candle in a closed flask—necessity of air. Action of heat on solids—expansion; on liquids—thermometer; on gases.

Experiments with a match—a candle.

Make a fire by friction, by "striking fire"—use of stones, of dry wood.

Things that burn without a flame, with a flame.

We heat liquids from the bottom—why? Where is it warmer, near the floor or higher up?

A tiled floor seems colder than a wooden floor—why?

When the flame is too hot the lamp chimney breaks—why?

Take a piece of paper soaked in paraffine—hold it perpendicular to heat rays until the paraffine melts—hold at an oblique angle until the paraffine melts.

Action of heat on all vegetation.

*Children's activities:* a) *at school.* Individual participation in every experiment if possible. Gathering of the necessary materials, making of preparations, setting up the experiments.

b) *at home.* If possible get together objects and materials needed for the experiments at school. Recording of the experiments made by drawings in the notebooks.

*Mechanical processes:* Collection of objects that burn.

OBSERVATION—ESSENTIAL CHARACTERISTICS ("Determinism")

*General ideas:* Shape, size, materials of fire utensils.

Material, color, character of everything that approaches the fire.

Construction of the house with reference to fire—placement of windows, of chimneys.

Uses to man of fire; as protection against cold; in the preparation of food; for disinfection, cleanliness; as a source of power; in industry.

What materials do we use for fuel, why? How are they used?

*Methods of presentation:* Characteristics of fire utensils—length, shape—the poker—spreading arms of the tongs—color. Draughts and their placement.

Materials used in stoves, in the construction of chimneys.

Why are pots and pans made of different materials according to their use (whether over the fire or not); color of stoves, of various pots and pans; shape of vessels for cooking—lack of corners.

Why do we not put windows near the ceilings? Why do not chimneys run down into the ground? Why are houses generally built of stone and iron?—seldom of wood?—The huts of the Congo, why are they of such inflammable materials?

What is necessary to make a fire draw? How can it be put out?

*Children's activities:* (a) *at school:* Discussion: take away the essential characteristics of things, what would result?

(b) *at home:* Illustrate by drawings certain characteristics recognized as essential.

(c) *visits:* to a hardware shop—to a factory for aluminum ware.

OBSERVATION—TECHNOLOGY

*General ideas:* Fire in the preparation of food—For heating purposes—In Recreation.
Business, commerce resulting from such uses.

*Methods of presentation:* Fire in the preparation of food—heating, melting, making palatable
How fire is lighted—how tended.
With what do we warm ourselves? wood? straw oil? gas? peat? Where do people use different fuels? Why?
Trades that depend on fire: the baker, the pastry-cook, the brick-maker, the smith, the glass-blower, the potter, etc. Stores that sell requisites for heating purposes.
Trades originating in the use of fire: coal merchant, chimney-sweep, fireman, stoker, etc.
Use of fire in recreation—Bengal lights, fireworks, bonfires (at festivals, etc.).

*Children's activities:* (a) *at school:* Visits to work shops where the uses of fire may be seen. Visits to the bakery, the pastry-cook's, the brickyards, the potteries.
(b) *at home:* Drawings of things observed in the note-books, addition of cut out pictures.

OBSERVATION—MEASUREMENT

*General ideas:* Amount of coal in a shovelful compared with that of a scuttleful?
Changes in size and appearance of substance brought in contact with fire—problems based on these changes.
Exercises in number using matches.
Amount of coal burned in a day in order to heat a school room. Size of a match, size of the stove.

*Methods of presentation:* Differences in weight, in size, of substances that have been burned (wood, bread, coal).
How many shovelsful of coal in a scuttleful? In two, in three scuttlesful?

How many pieces of coal in a shovelful? In two shovelsful? In a scuttleful?

Resistance to heat: bringing different parts of the body close to the fire—which is the most sensitive to heat?

Wooden matches and those made of paper—which burn most rapidly?

How many piles of 5, 6, 7 matches can be made from the contents of one box—of two boxes, of three? etc.

Height and size of a match box. Size of half a box, of one-fourth of a box. If a paper match burns entirely, while a wooden match of the same size is only half burned, what length must a paper match be made to burn as long as the wooden match?

*Children's activities:* (a) *at school:* Verification by the group of measurements made by individuals.

Individual measurements and exercises. Use of matches in number drill.

(b) *at home:* Problems making application of the measurement made at school.

Measurements to be made at home (of a slightly different character from those made at school). Results written and illustrated in the notebooks.

*Mechanical processes:* Number games. Drill in mechanics of number.

---

PROTECTION AGAINST COLD AND THE ANIMALS

(Teacher's notes on the preparation of lessons)

OBSERVATION

*General ideas:* The animals' means of protection against cold. How we help to protect them against cold. How they help to protect us against cold.

*Methods of presentation:*

*How animals protect themselves against cold:*

Those that become dormant: frogs, mussels, worms, chrysalids, lizards, turtles, wasps (sleep without eating).
Those that store provisions: squirrels, rats.
Those that migrate: swallows, thrushes, larks.
Those that become acclimated: sparrows, certain insects, etc.
Those that come to us from colder climates: crows, tarins, warblers, redbreasts.

*How we help protect the animals against cold:*

By supplying kennels, stables, barns, chicken houses, warrens, baskets (for cats), sometimes even simple garments.

*How the animals help us to protect ourselves from cold:*

By giving us wool, silk, leather, skins.
By working for us (transportation of building material by horses).

*Children's Activities*

*At school:* Find, either at school or when on walks and trips, examples of animals that are dormant—in the ground, under stones (various insects), at the foot of trees, etc.

*At home:* Draw pictures of scenes experienced in the search for dormant animals.
Collect specimens of wool, silk, leather, etc.

OBSERVATION—ESSENTIAL CHARACTERISTICS ("Determinism")

*General ideas:* Find the cause of several phenomena you have observed or are observing:
Why are we unable to withstand cold?
Why do animals disappear in the winter?
Why is it cold in front of the school house and warm behind it?

*Methods of Presentation:*

Why do worms bury themselves in the ground instead of working up into the trees?

How is it possible for the swallows to migrate to the warm countries without losing their way?

Why is it we are warmer in clothing that is not tight? Effect of color on clothing?

Why does one grow pale and one's fingers get stiff with cold?

Why do we feel warm when we put on a woolen garment? (Take a coat from the coat room, it will be cold, but if we put it on what is the effect?)

Why is wool warmer than cotton? than linen?

Why are stockings made of wool? of silk?—(Porosity, durability).

*Children's Activities:*

*At school:* Experiences at first hand—formation of individual judgments.

*At home:* Illustrations of specified characteristics.

OBSERVATION—TECHNOLOGY

*General ideas:* Practical applications—use of wool, silk, leather, furs.

*Methods of presentation:*

Construction of a loom. Making of dresses, gloves, shoes of leather, etc. (doll's clothing). Laundering of doll's clothing. Blacking of shoes.

Use of fat—frying.

Use of wool—dresses, coats, vests, stockings, gloves, hats, shawls, scarves, socks, blankets, quilts, mattresses, slippers, carpets, curtains, padding, etc.

Use of silk—dresses, cloaks, hats, gloves, stockings, curtains, lingerie.

Use of leather—gloves, shoes, clothing (for automobilists, aviators, hunters), gaiters, boots.

Use of fur—neckpieces, coats, hats, muffs, slippers, gloves, rugs.

Trips—visits to stores in the city.

*Children's Activities*

*At school:* Make as many of the above articles as possible and perform the various operations made necessary by their use.

*At home:* Drawings of the various activities undertaken at school. Occasionally the making of some article, or the finishing of something begun at school.

OBSERVATION—MEASUREMENT

*General ideas:* Exercises in measurement related to clothing—weight, size, thickness. Measurements taken by means of clothing. Sensory exercises with various fabrics.

*Methods of Presentation:*

Comparative weight of clothing made of wool, silk, etc.

Weight of a dress compared with weight of one's underwear.

Lengths of different dresses—whose is longest? shortest? How many hands long? Who has the heaviest coat? the biggest shoe? the biggest glove? How many children in the class? How many pairs of shoes? How many coats? How many sleeves?

Of the animals named which is the largest? Are there any larger than they are? What animals are smaller?

How many articles of clothing does a child wear? How many are of wool? etc.

Compare the weight of the same quantity of wool, of leather, of silk; then compare quantities having the same weight, and weights of the same quantities when wet.

*Children's Activities*

*At school:* Make a collection of samples of fabrics—woolen, silken, stiff, strong, new, worn, worn out, loose woven, close woven, soft, velvety, etc. Let the children determine the different qualities of their own clothing.

*At home:* Look up scraps of different materials to be taken to school for the class to determine the kind of fabric in them.

# CONCLUSION

*We have been experimenting since 1901 with retarded and exceptional children, and since 1907 with the normal and so-called normal, and we have arrived at a practical adjustment without committing ourselves to its continuance.*

—Ovide Decroly, *New York et Bruxelles*, Pour l'Ére Nouvelle, July, 1923.

## CHAPTER XI

### CONCLUSION

Here then is the end of our exposition. Its aim has been to report the results of an experiment as objectively as possible, and to show how the Decroly principles have been applied in a conventional school environment. One must not ignore the fact that the demonstration at Elementary School C. was made under particularly favorable conditions. In the first place, the class was composed of little girls, and it appears that girls at this age are generally more apt as pupils than their brothers; in addition, these children belonged for the most part to families in comfortable circumstances, educated people who were able to co-operate with the school; again the school principal, Mlle. Carter, who held the happiness of the children a major argument in our favor, was sympathetic at all times and aided us in every way that she could. Thus, in spite of some difficulties created by the opposition of individuals, people who regarded the children's interests from a different viewpoint, it cannot be denied that the opportunity offered at Elementary School C. was an exceptional one.

And this fact might well constitute an objection to the Decroly methods, if it were not that trial of them was being made at the same time, in other

classes, far less favored both as to the children and the homes from which they came.

Moreover, these other experiments were made without long periods of training for the teachers undertaking them, sometimes indeed without any preparatory training. Several of them supervised by me, others made independently, have clearly demonstrated that this kind of teaching is perfectly practicable in the ordinary school. As many as ten first-grade classes made the experiment and all achieved brilliant results, sufficiently so to keep the great majority of the principals and teachers from any desire to return to the old régime.

New experiments are now in progress in some of the suburban schools, notably at St. Gilles and at Anderlecht. In the latter place an experiment of special promise has been undertaken. Thanks to M. Melckmans of the Board of Education, the work there will be placed on a scientific basis. M. Boon, one of Dr. Decroly's collaborators at the Polyclinic Hospital, has been released from his duties there to devote himself to organizing and supervising the experiment. The children are to be classified according to mental ability, and this should make the results obtained of special value.

The reader may be interested to contrast briefly the differences between the principles followed by the Decroly school and the methods advocated by Mme. Montessori. And we may note incidentally, that Dr. Decroly had already developed and pub-

lished his pedagogical ideas before the work of Mme. Montessori became known. His institute for exceptional children dates from 1901, and thus antedates Mme. Montessori's experiments. His first work in the teaching of reading dates from 1906, and it was at about the same time that he published the first sketch of his school plan in two papers, one concerned with abnormal, the other with normal children.[1] His first school for normal children was established in 1907, and a second one was started in 1910. It was in 1908 that students from the normal school at Mons with their Principal, M. Mirguet, and some of his staff visited both the school for normal and the school for abnormal children and published a description of their visit.[2] Thus it cannot be claimed that Dr. Decroly's work has been in any sense a result of Mme. Montessori's. The principle of individualization, of freedom under guidance, the use of games, advocated by Mme. Montessori had all been recommended by Dr. Decroly as early as 1908 in the papers just cited. These striking similarities are undoubtedly an outcome of the fact that both Dr. Decroly and Mme. Montessori began their work with abnormal children. Dr. Decroly, however, more nearly approaches the teaching of Dr. John Dewey in his attempt to supply activities based on

[1]Decroly, O., *Principes généraux relatifs au traitement des enfants irréguliers.*—Communication au Congrès. Bulletin de la Société de médecine mentale, 1908.

Id. *Une école dans la vie.* École Nationale, 1908, Nos. 11, 12.

[2]*Deux écoles types pour enfants irreguliers et reguliers pars quelques professeurs et élèves de l'École Normale de Mons*—L'École Nationale, 1908, Nos. 19 & 20.

the child's natural surroundings and to prepare the child for the actualities of life. Mme. Montessori on the other hand, like Séguin, retains the old idea of isolated "branches of learning," and leaves it to chance to provide any program of relationships. She begins her teaching of reading with sense experiences in relation to individual letters, and has a tendency to prefer abstract materials.

Dr. Decroly insists on a program of logically developed relationships; takes for his point of departure experiences at first hand (observation), and in connection with these, development of the vocabulary and the making of comparisons. In this way he unifies and covers the essentials including the acquisition of reading. Above all he would have subject matter drawn from those sources that nature affords at all times and in such profusion. He makes use of games as a means of assuring adequate repetitions for the acquisition of techniques, and the pupil's self-activity in their acquisition, but the subject matter used in the majority of these device materials is drawn directly from Nature.

To sum up, the conspicuous distinction between the two methods is this, that the Montessori method attempts from the beginning to give the child practice in the use of the tool subjects (language, number, writing, reading), while Dr. Decroly is concerned with placing these tools at the disposal of the processes of thought, and above all with the fostering of those processes.

Never having experimented with Montessori

methods in the primary school, I cannot draw on my own experience for comparisons, the demonstration observed in the schools of Tessin, however, justifies me, I believe, in the assertion that the results obtained[1] by its use are inferior to those that I have obtained myself and have seen obtained by others.

To summarize in a word this comparison with the Montessori method, one might say it bears the same relation to the Decroly teaching as the limbs of a tree, detached and dead, bear to the tree itself entire and alive.

As a matter of fact one finds in the Decroly teaching all the great principles advocated by Mme. Montessori, but her methods remain too often verbal, abstract. She leaves very little time for activities that place the child in contact with realities. The subject matter she provides is the same as that offered by the conventional school, she simply makes it more concrete by supplying manipulation and games, but she neglects to attach the branches to the tree.

However, much remains to be done in our schools, *l'École Active* and the introduction of its principles can no longer be waived aside as a Utopian dream. The Decroly experiment proves that, imperfect as

[1]Discussed in my thesis presented at the Institute Buls-Temple (the higher normal school of Brussels) on the subject: *"Les tendances actuelle en pédagogie à l'étranger et en Belgique."*

the foregoing exposition of it may well be. In the presence of the work itself one cannot but appreciate that, by his enterprise, his years of careful work, his deep knowledge of child nature, Dr. Decroly is in a fair way to transform the school, and by so doing to influence profoundly the future of society. All thanks to him if our "standard schools" give place to "active schools." He is making a contribution that will be recognized by all who have at heart the free and harmonious development of the child's possibilities, by all who contend for the child's right to live fully and happily.

SPECIMENS OF CHILDREN'S WORK

Fig. 8.—Brussels and its environs. Relief map in clay made by third-year children.

Fig. 9.—Brick house, a group project by first-year children.

Fig. 10.—Match-box village, a group project executed by twenty-three first-year children.

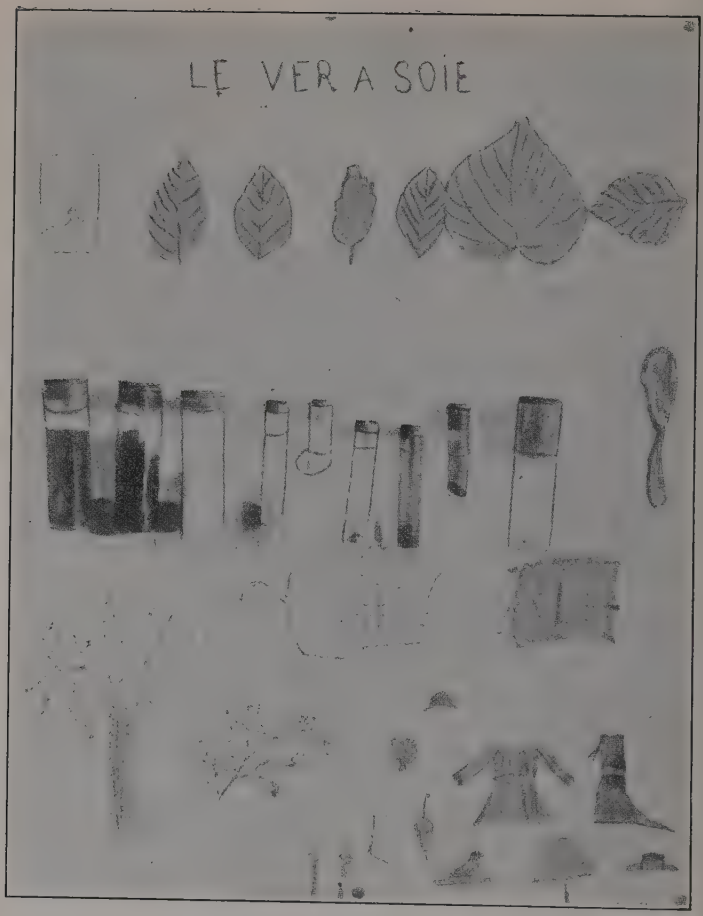



Fig. 11.—"The silk worm." Review chart made by a group of twenty children (first year).

Fig. 12.—"Linen." Review chart made by a group of seven children (fourth year).

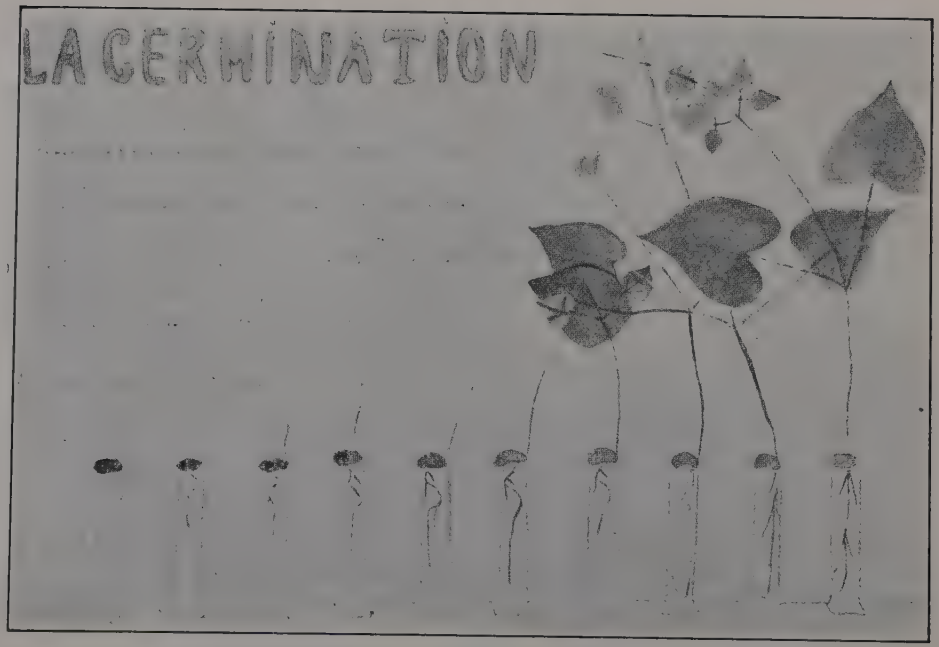



Fig. 13.—"Germination of a seed." Chart by a group of twenty-three children (fourth year).

Fig. 14.—Model of the schoolroom. Made by a class of third-year children on a scale of 1:8. This project was entirely the children's own work. Every detail of the room's furnishing and decoration was reproduced. Undertaken in connection with the center of interest for the year, "The need to work." (*See also* Fig. 3.)

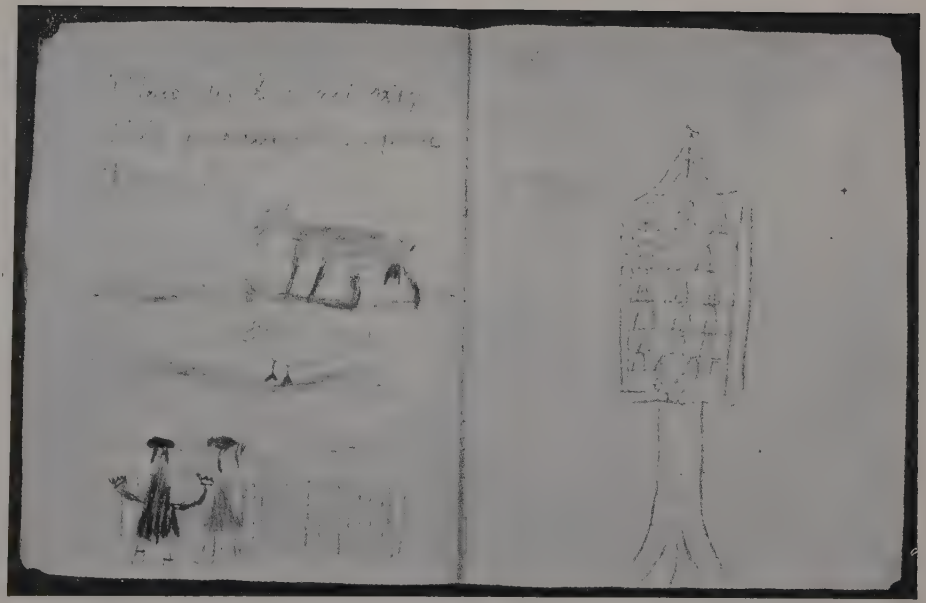


Fig. 15.—"A walk in the park." Page from observation note-book, first year ("X," 6 yrs.).

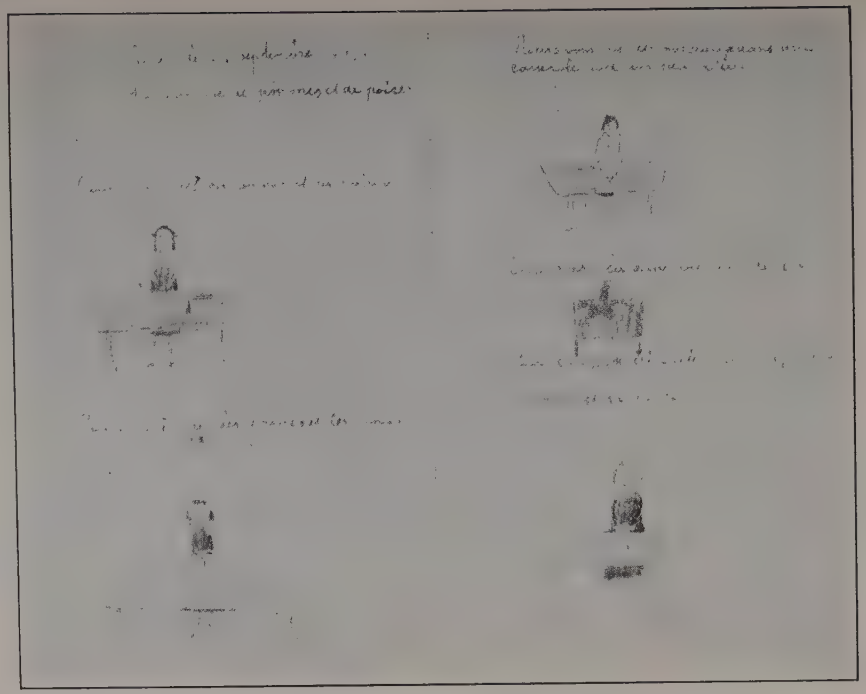


Fig. 16.—"Making the compote." Observation note-book, second year ("X," 7 yrs.).

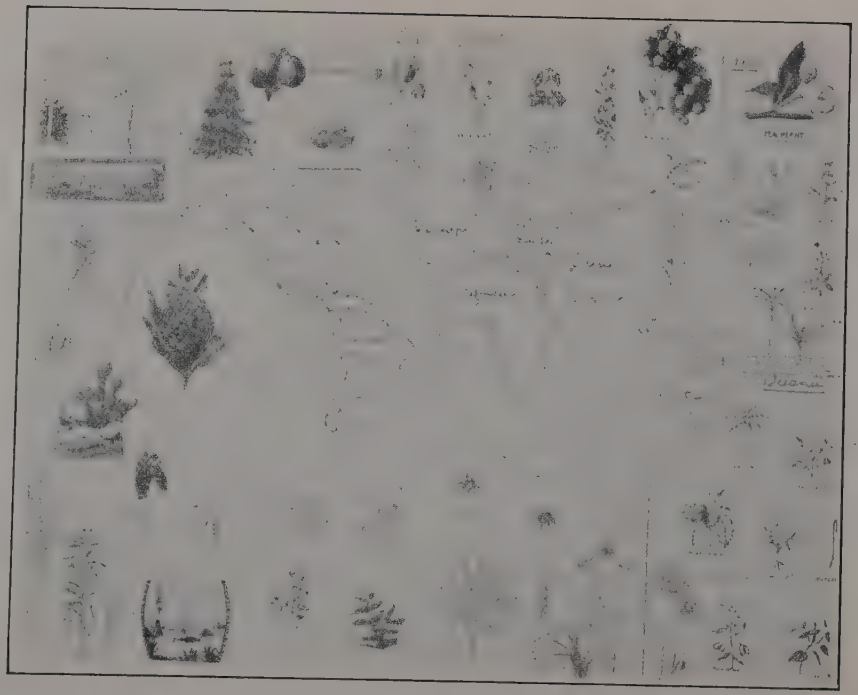


Fig. 19.—"Distribution of plant life." Association note-book, fourth year ("X," 9 yrs.).

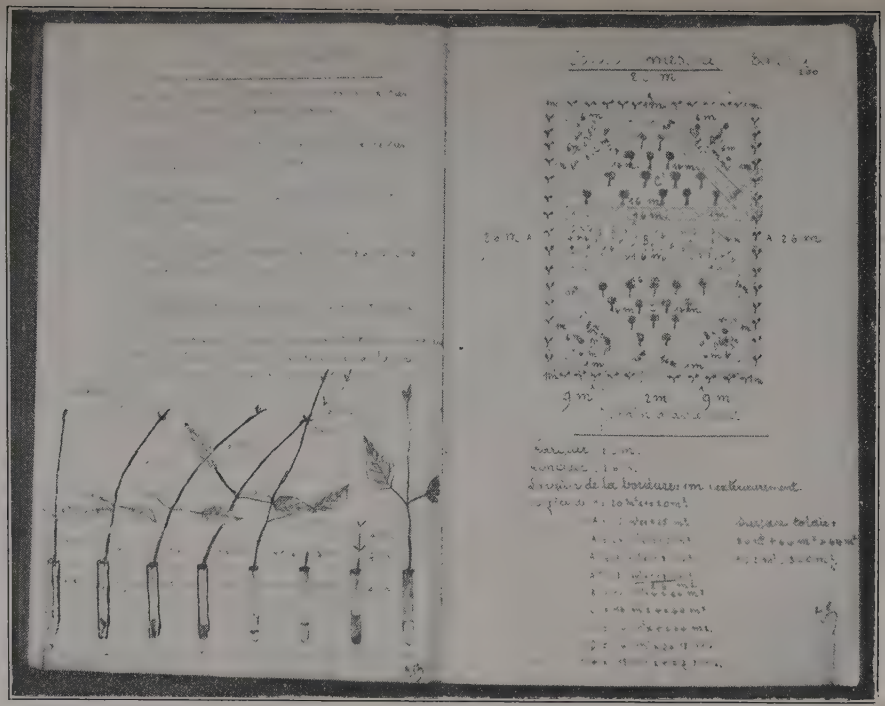


Fig. 20.—Measurements of a sprouting seed and of a garden. Arithmetic note-book, fourth year (child of 9½ yrs.).

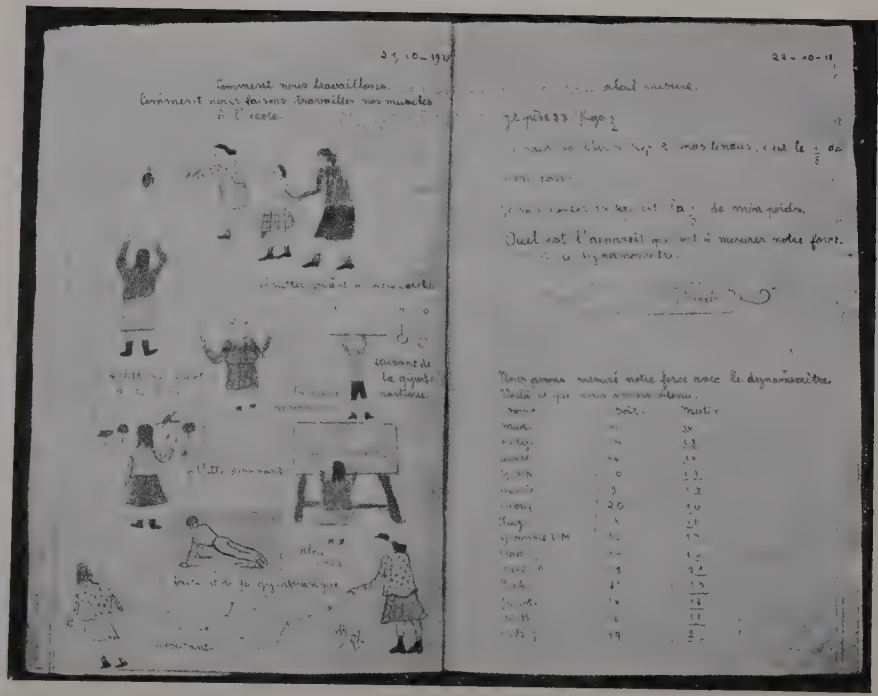


Fig. 21.—"The work of our muscles." Exercise at school and measurements of strength. Observation note-book, third year (child of 8 yrs.).

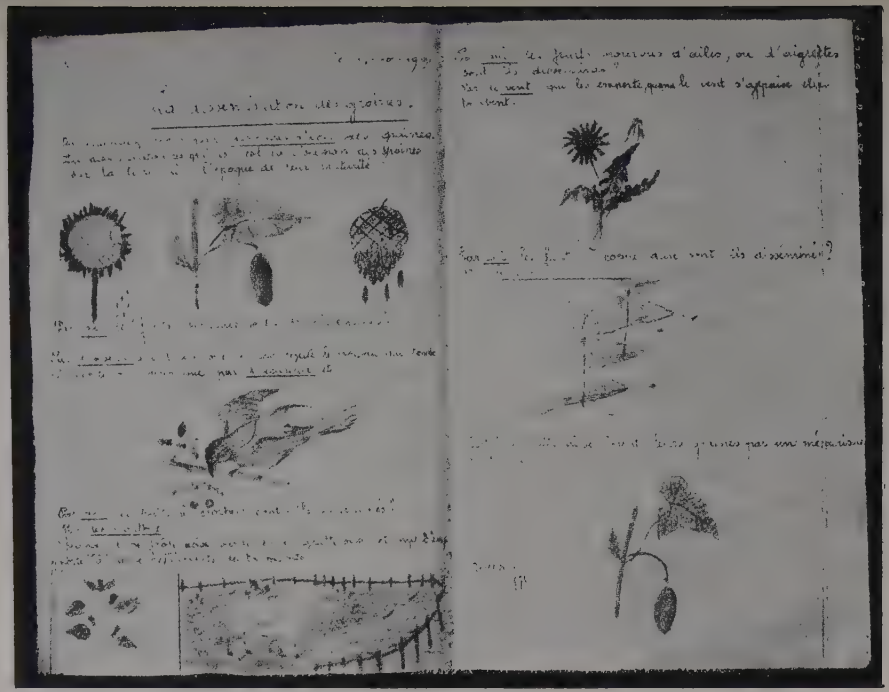


Fig. 22.—"The dissemination of seeds." Observation note-book, fourth year (child of 9½ yrs.).

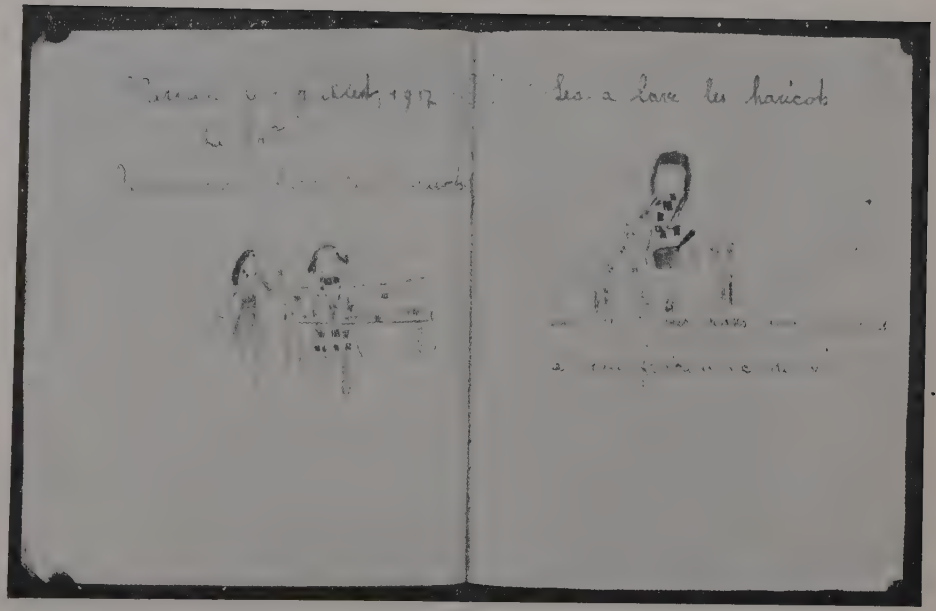



Fig. 23.—"Cooking the beans." Augusta's observation note-book, first year (6 yrs.).

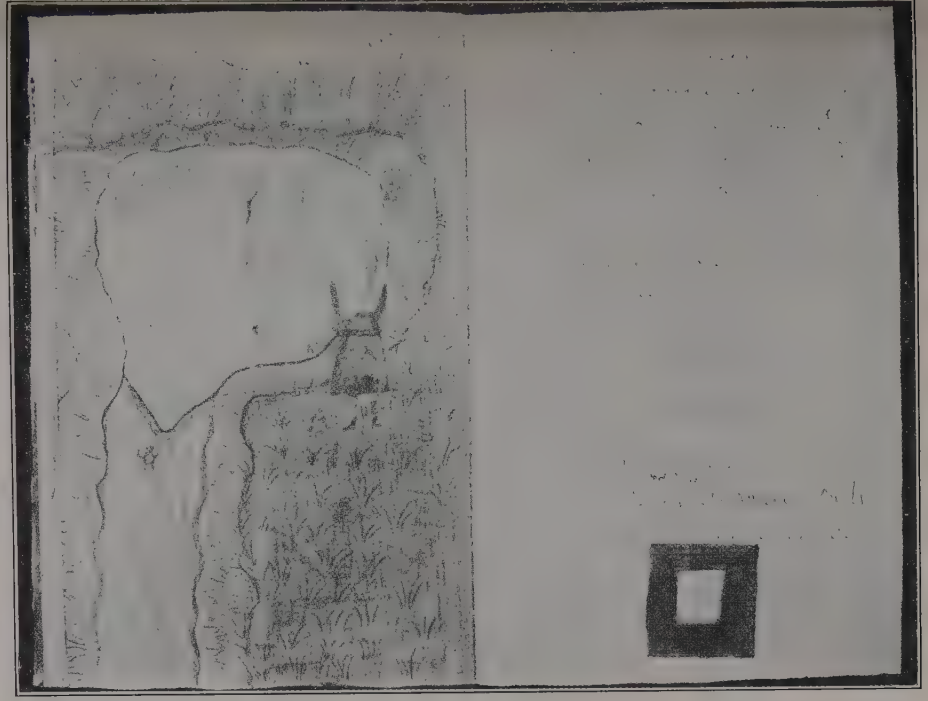


Fig. 24.—"Eggs of the frog and of the silkworm." Augusta's observation note-book, second year (7 yrs.). The drawing recalls Dr. Decroly's use of the "bird's-eye view" as a test of development.

Fig. 25.—"Man's work for the plant world." Augusta's observation note-book, third year (8 yrs.).

Fig. 26.—"The work mammas do in the Congo." Augusta's association note-book, third year (8 yrs.).

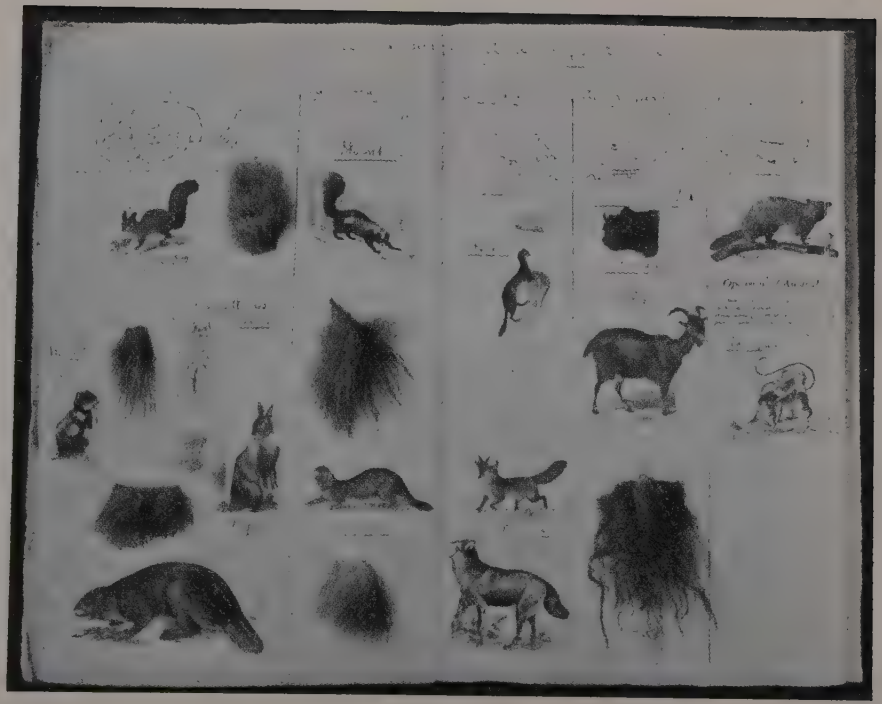


Fig. 27.—"Fur-bearing animals." Augusta's observation note-book, fourth year (9 yrs.)

Fig. 28.—"Fur-bearing animals of Europe." Augusta's association note-book, fourth year (9 yrs.).

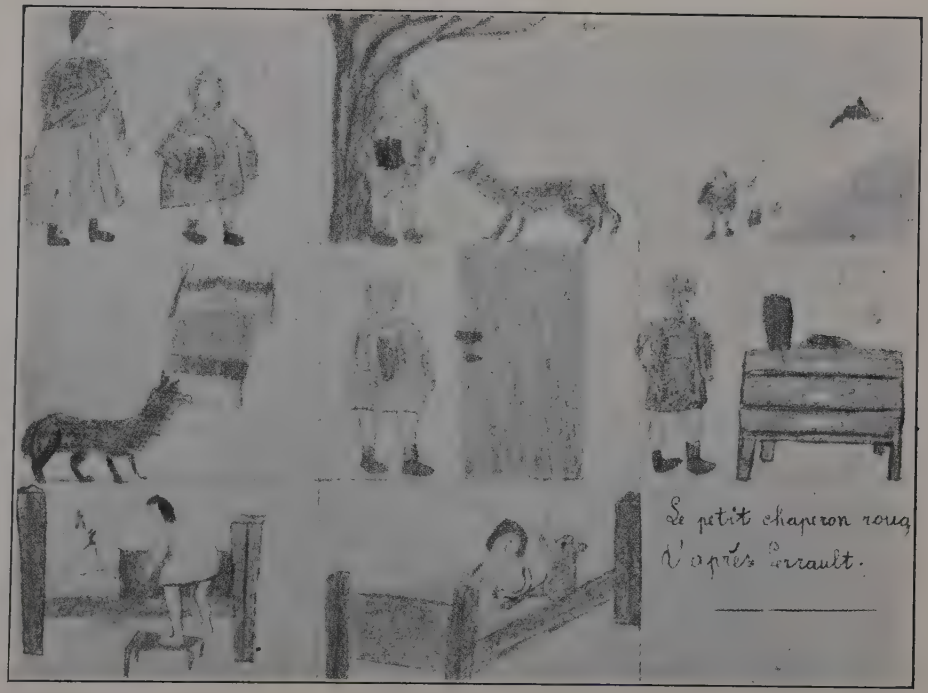



Fig. 29.—Free work in drawing. "Red Riding Hood." Augusta (7 yrs., 7 mos.).

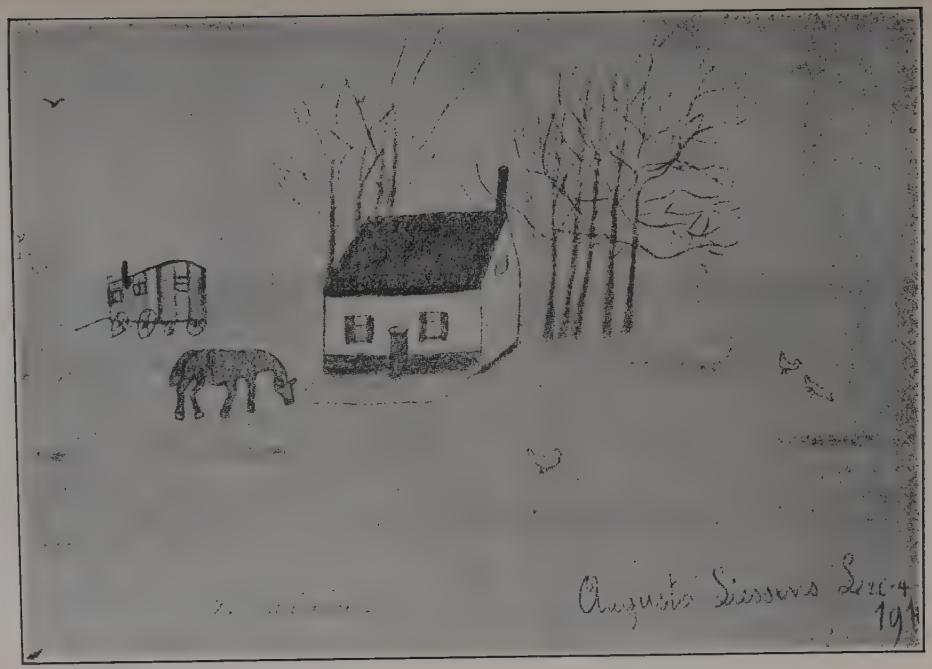



Fig. 30.—Free work in drawing, Augusta (8 yrs., 4 mos.).

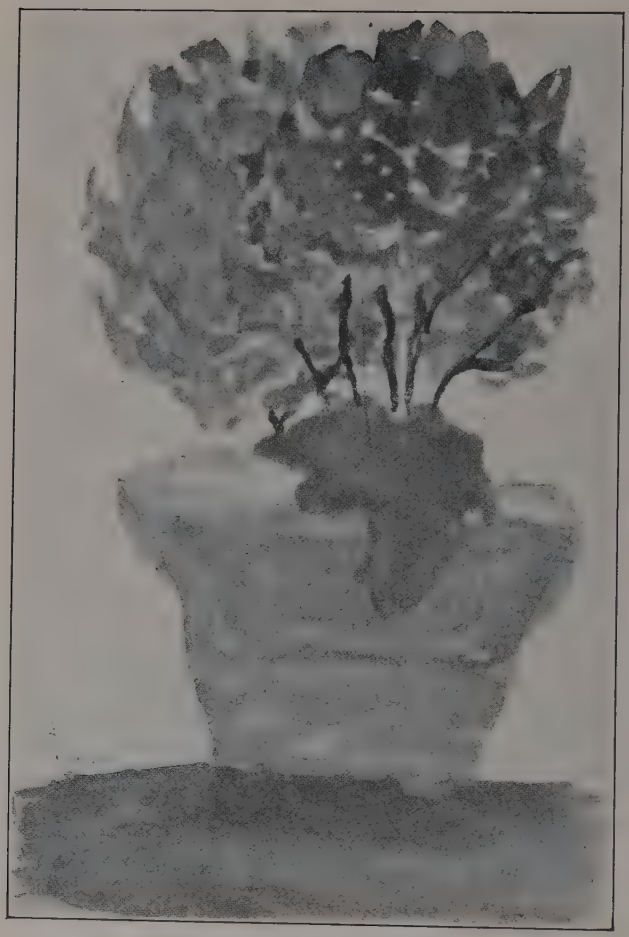


Fig. 31.—Drawing from the object. Augusta (9 yrs., 6 mos.).

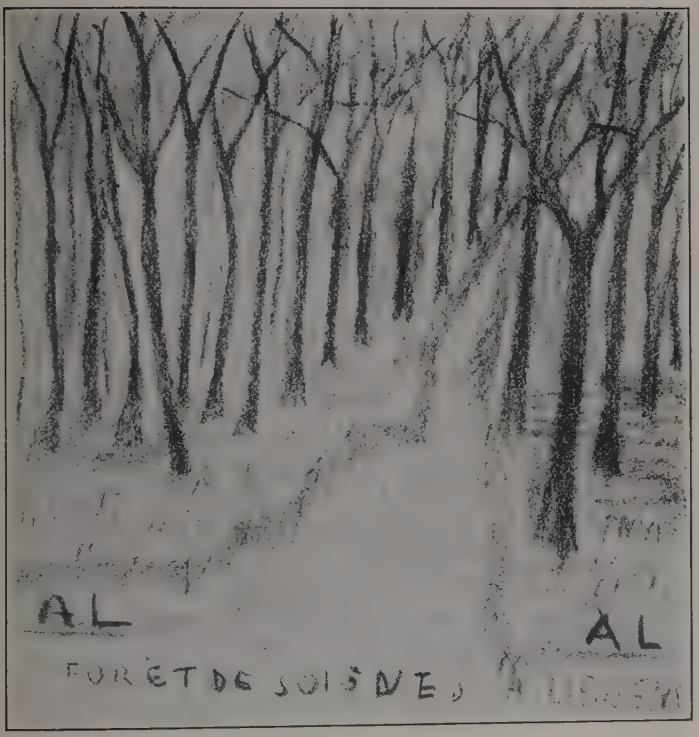



Fig. 32.—Imaginary landscape. "The Forest of Soignes." Augusta (9 yrs., 6 mos.).

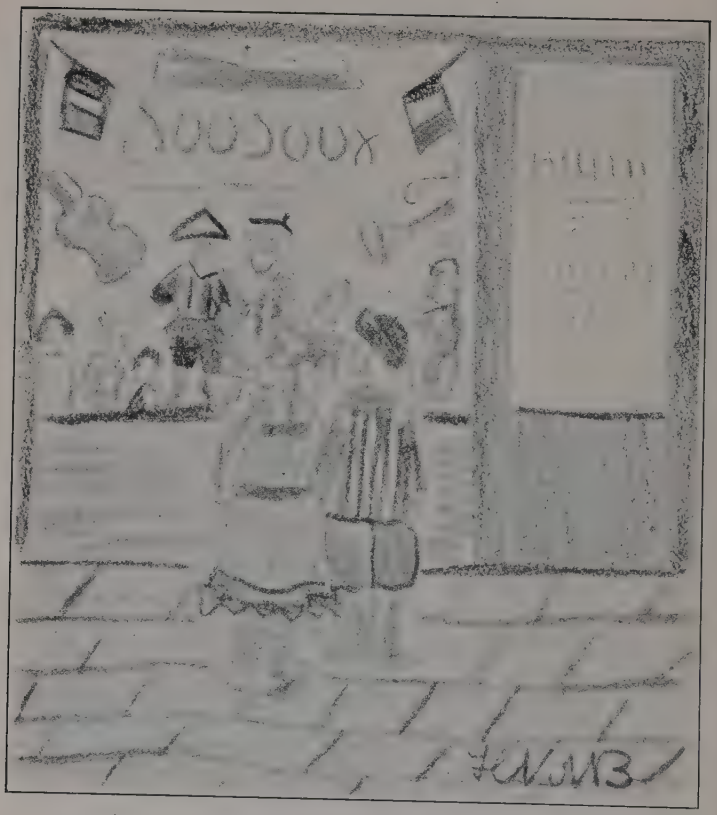


Fig. 33.—"St. Nicholas." Illustration for a composition Hélène (10 yrs.).

Fig. 34.—"To My Weeping Willow." Illustration for a composition, Hélène (11 yrs.).

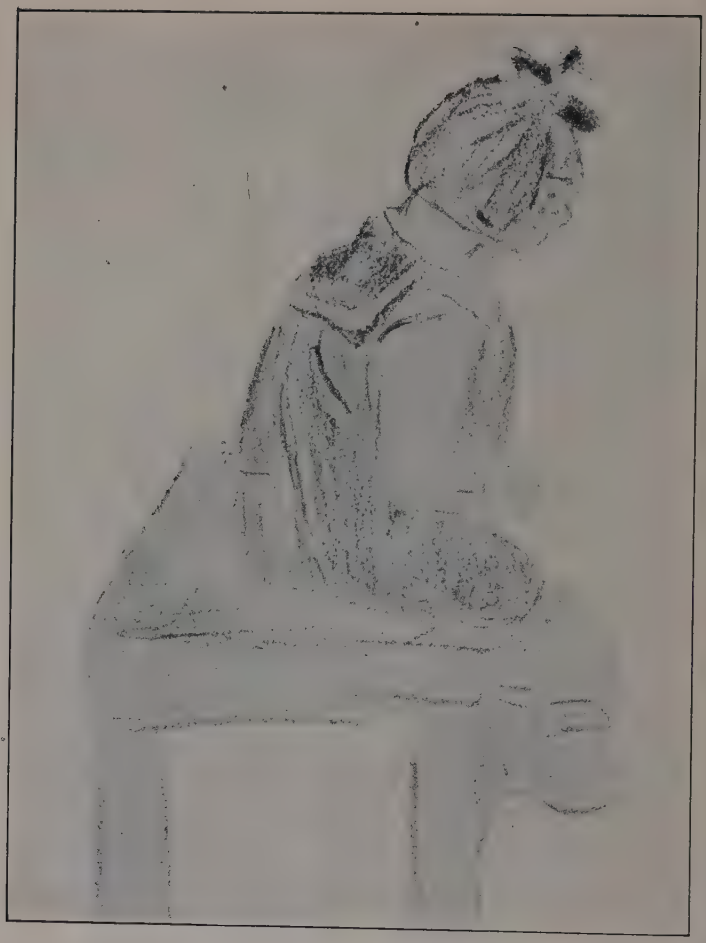


Fig. 35.—Girl drawn from life. Hélène.

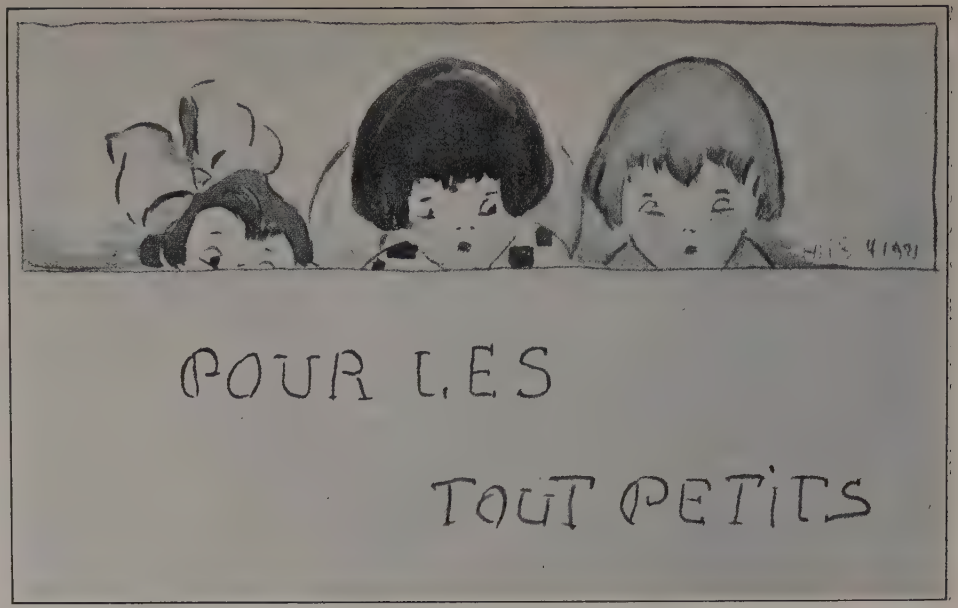



Fig. 36.—Cover design for the collection of stories written for the children of the first grade. Hélène (12 yrs.).

Fig. 37.—"For Grandfather's Birthday." Illustration for a playlet, Hélène (12 yrs.).

Fig. 38.—"Lapinot's Dream." Illustration for a story, Hélène (12 yrs.).

Fig. 39.—"Jack Rabbit." Illustration for a poem, Hélène (12 yrs.).

# APPENDICES

# APPENDIX A

## TEACHER'S JUDGMENT GRAPHS

THE teacher's judgment graph devised by Dr. Decroly is an attempt to assemble certain observations and estimates that do not lend themselves to statistical treatment, or even to the conventional ratings by percentages and grades (A, B, C, etc.). It will be evident that its use directs the teacher's observation to traits having special significance for the psychologist, without demanding a technique for their assessment. As school records, these charts possess the advantage of making evident at a glance those individual cases, that in the teacher's opinion call for special attention from the psychologist, and of indicating what appear to be the outstanding features of interest. Their influence on the teacher's thinking and observation will be apparent.

In the graphs shown each section or field includes the entire space, from the outer rim of the centrally placed circle, to the outer edge of the diagram—the inner line parallel to the outer edge of the diagram being without significance.—Within each of the numbered fields red chalk has been used to indicate favorable tendencies, blue chalk to indicate those considered unfavorable. In the reproductions the red chalk is represented by the white field, blue chalk by the black. The various sections are numbered in accordance with the following plan:

# APPENDIX A

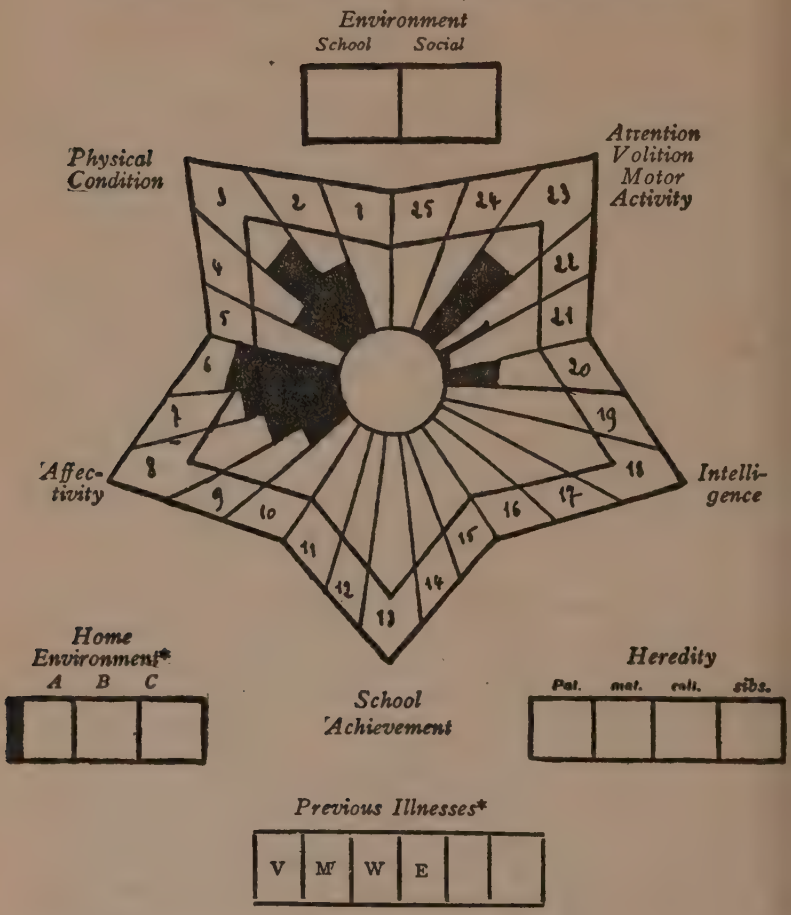
## TEACHER'S JUDGMENT GRAPHS

THE teacher's judgment graph devised by Dr. Decroly is an attempt to assemble certain observations and estimates that do not lend themselves to statistical treatment, or even to the conventional ratings by percentages and grades (A, B, C, etc.). It will be evident that its use directs the teacher's observation to traits having special significance for the psychologist, without demanding a technique for their assessment. As school records, these charts possess the advantage of making evident at a glance those individual cases, that in the teacher's opinion call for special attention from the psychologist, and of indicating what appear to be the outstanding features of interest. Their influence on the teacher's thinking and observation will be apparent.

In the graphs shown each section or field includes the entire space, from the outer rim of the centrally placed circle, to the outer edge of the diagram—the inner line parallel to the outer edge of the diagram being without significance.—Within each of the numbered fields red chalk has been used to indicate favorable tendencies, blue chalk to indicate those considered unfavorable. In the reproductions the red chalk is represented by the white field, blue chalk by the black. The various sections are numbered in accordance with the following plan:

## Chart 1.

### Augusta—End of her second year at school.




*Home Environment—A, Material; B, Intellectual; C, Moral.

*Previous Illnesses—V, Varicella; M, Measles; W, Whooping-cough; E, Enteritis

*Physical Condition*

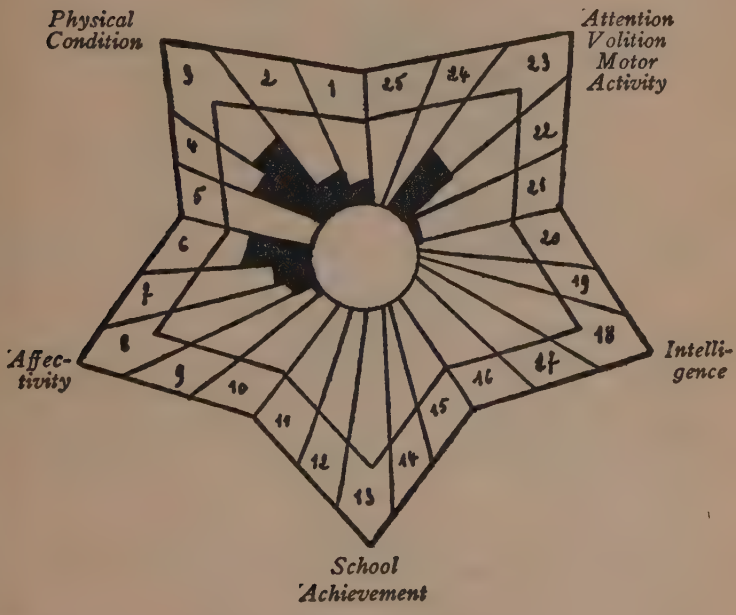
1. Nervous system—reflexes.
2. General health at the time of examination.
3. Temperament as indicated by physical activity.
4. Fatigability—resistance to physical fatigue.
5. Pubertal development.

*Affectivity*[1]

6. Self-regarding tendencies — physical plane (cold, hunger, etc.).

CHART II.

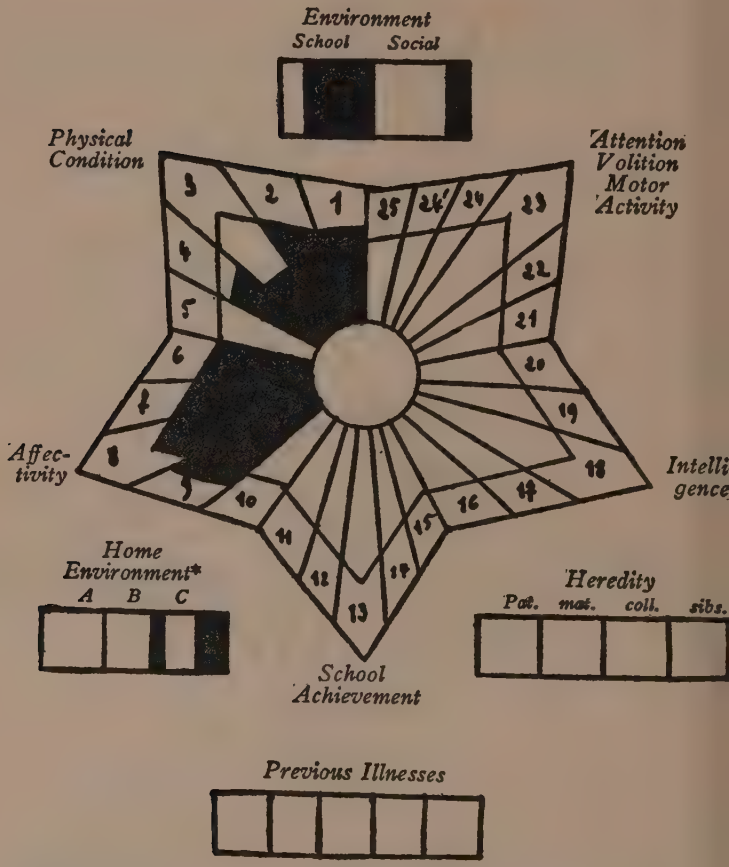
Augusta—End of her fourth year at school.




[1]Estimates under "Affectivity" are based on data furnished by the questionnaire discussed in Appendix B.

## Chart III.

### Helene—End of her year in the second grade. (Her first year in the class.)

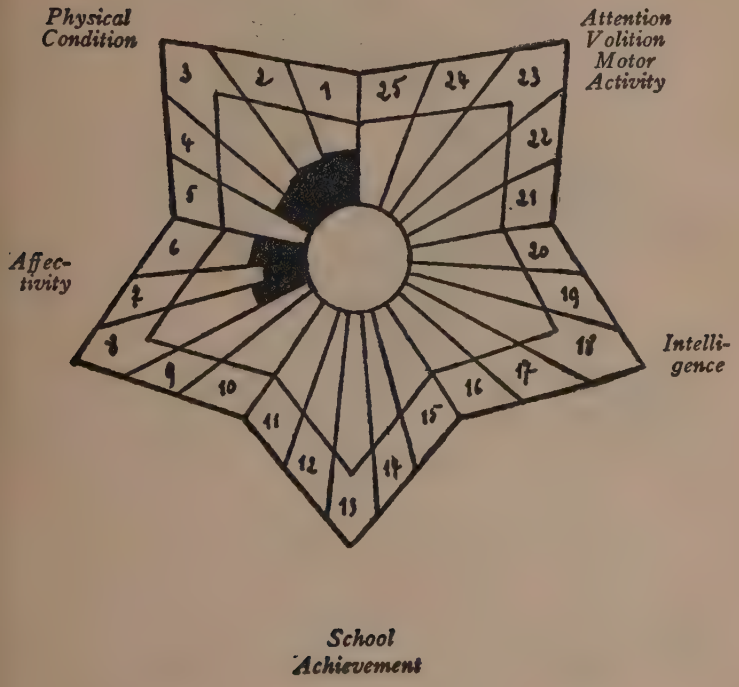



*Home Environment—*A,* Material; *B,* Intellectual; *C,* Moral.

7. Self-regarding tendencies — developed plane (self-esteem, tendency to dominate others, etc.).
8. Social tendencies—elementary plane (passivity, evidences of sympathy, affection, courtesy, etc.).
9. Social tendencies — developed plane (activity, self-sacrifice, organizing ability, etc.).

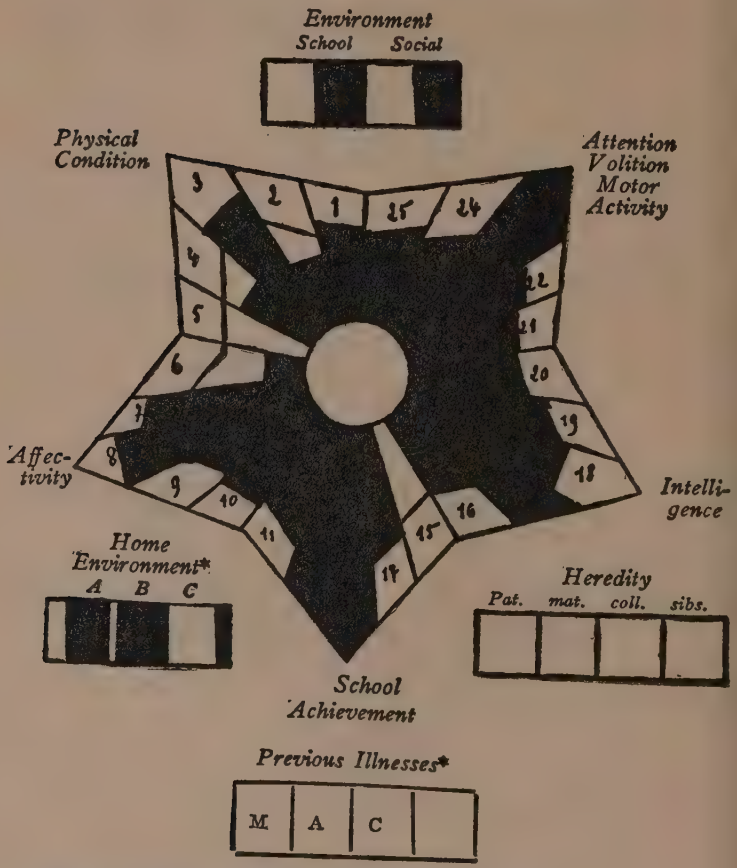
## Chart IV.

Helene—End of her year in the fourth grade.



## Chart V.

Yvonne—End of her year in the second grade
(Her first year in the Decroly class.)



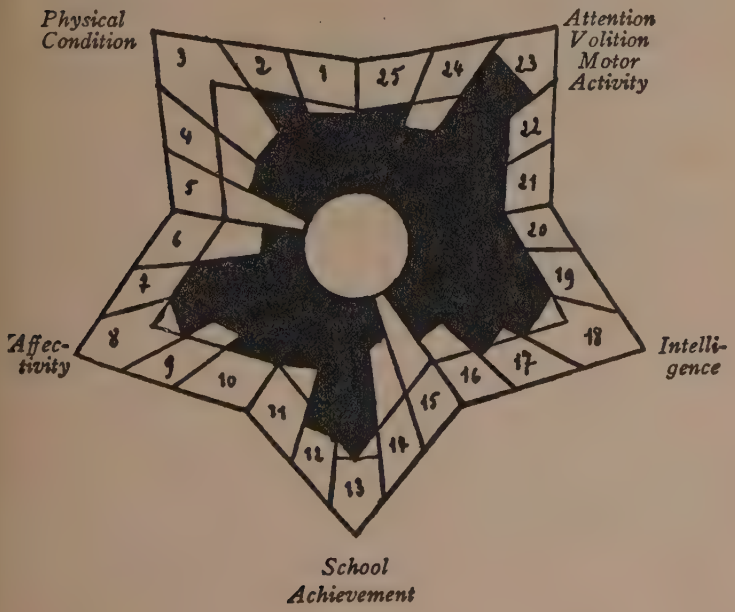

*Home Environment—A, Material; B, Intellectual; C, Moral.
*Previous Illnesses—M, Measles; A, Albuminuria; C, Convulsions.

*School Achievement*

10. Manual work.
11. Scholarship on the lower plane (inferieur), branches calling for memorization, mechanics of technique.
12. Scholarship on the higher plane (superieur), branches calling for abstract conceptions, reasoning ability.
13. Comprehension of language—abstract terms (advanced reading, problems).
14. Comprehension of language—concrete terms.

CHART VI.

Yvonne—End of her year in the fourth grade.



15. Exercises depending on sense acuity—hearing, vision.
16. Exercises depending on memory—recall of sense impressions.

*Intelligence*

17. Intelligence on the higher plane (superieur), as shown by Binet tests, reasoning ability, etc.
18. Intelligence on the lower plane (inferieur), as shown by response to practical situations.
19. Verbal expression—enunciation.

*Attention, Volition, Motor Activity*

20. Rapidity of movement.
21. Precision of movement.
22. Habit formation.
    (1) facility in acquisition of motor habits.
    (2) retention of motor habits.
23. Attention on the higher plane (superieur), capacity for reflection.
24. Attention on the lower plane (inferieur), directed to concrete details.
25. Fatigability of attention (higher and lower plane).

## APPENDIX B

### QUESTIONNAIRE ON AFFECTIVITY

THE following questionnaire is one that has been used by Dr. Decroly for studying the affective reactions of children in their accustomed environments—that is to say, in the home and at school. Its object is to facilitate the psychologist's understanding of the individual by informing him as to those reactions which reflect the child's tendencies, his inclinations, his instinctive needs, his emotions, his sentiments, and his passions.

The answers must of necessity be given by persons who live in close contact with the child, who possess certain powers of observation, and sufficient intellectual development to understand the terms employed. Moreover, to be of value, the answers need to be as impartial as possible, and as little influenced as possible by preconceived ideas. The father, mother, or other members of the family who have been thrown intimately with the child, the governess in particular, should be able to give the necessary answers.

The majority of the questions are of a positive import, and imply the existence of a trait or a reaction, a few only are of negative import, and concern themselves with the absence of a trait or a reaction.

The classification and order followed in the different divisions are based on the general theory of a hierarchy of tendencies related to the deep-seated, fundamental instincts.

Under one division are included the instincts and tendencies relating to the conservation of the individual; those concerned with self-defense, whether on the mental or physical plane; those concerned with self-assertion, both physical and mental, with the tendency to self-aggrandizement, to monopolization of the material environment, and to control of the realm of ideas as well; and we have too, the qualities and weaknesses that result when such tendencies are found in combination, superimposed or in conflict.

Another division includes the instincts and tendencies that have as their object the conservation of the species—those related to the instinct of sex, to the parental instinct, and to the development of the various social sentiments.

A third division deals with the characteristics displayed in connection with the child's activities, and since these bear a relation to certain manifestations known as volitional they place in evidence those traits that still continue to be termed "the will."

The questions in a fourth division relate more closely to intellectual characteristics, and the affective reactions indicated by the answers given, may be expected to throw light on certain mental traits, and thus assist to verify the findings made in the psychological and pedagogical examinations.

If the data afforded by this questionnaire are to be correctly interpreted, they must be considered in relation to the results of the mental examination, especially to the findings on memory and attention. In addition their corroboration and completion must be looked for in the facts of heredity, and of the individual history, physical and mental, in the home and at school.

In marking the questionnaire the following signs have been used:

+ indicating the existence of the quality or defect.

— indicating the lack of the quality or defect.

× indicating that the contrary is true.

± indicating that the quality or defect exists to a slight degree but not markedly.

? indicating that the answer is unknown or in doubt.

Signs following numbers refer to the questions so numbered.

When desired, supplementary remarks may be added after the sign.

If the trait is very marked, a circle may be added, thus ⊕ ⊖.

If the trait is of long standing, dating from early infancy, for example, it should be indicated by an arrow placed above the sign, thus $\overleftarrow{+}$.

If the trait tends to disappear, indicate by an arrow pointing downward and followed by the sign, thus ↓ +.

If the trait tends to increase, indicate by an arrow pointing upward and preceded by the sign, thus + ↑.

If the trait has been present but has disappeared, indicate by an arrow below the sign, thus $\underset{\rightarrow}{+}$.

If it is believed the trait is desirable for the child or its family, the sign may be enclosed by a red pencil mark.

If the trait is believed to be undesirable, the sign may be enclosed by a blue pencil mark.

In conclusion we may facilitate the work of interpretation by bringing together all the data grouped under a single division.

a) Self-regarding tendencies (egocentric—conservation of the individual).

b) Social tendencies (exocentric—conservation of the species).

c) Traits displayed in connection with activities (reflecting affectivity).
d) Intellectual traits (reflecting affectivity).

It may also be found desirable to assemble any data that tends to support a tentative conclusion without reference to the division in which they may appear.

In the following example the marking refers to Augusta (see p. 133 to p. 146). The questionnaire was submitted to her family during her fourth year at school, certain details being supplied by the school.

STUDY OF AFFECTIVITY

A. SELF-REGARDING TENDENCIES (EGOCENTRIC—CONSERVATION OF THE INDIVIDUAL)

I. INSTINCT OF SELF-PRESERVATION—PHYSICAL PLANE

1. *Appetite*
   Large, small — None at all for certain foods
2. *Greedy*
   Desires certain foods in excess, voracious —
3. *Special tastes*
   For certain foods, certain drinks —
4. *Exaggerated thirst*
   Needs to drink between meals. Unable to take a walk without drinking frequently —
5. *Reaction to certain foods*
   Distaste or nausea felt at sight of certain foods — Eggs, milk, meat +
6. *Sensitive to physical pain*
   Exhibits more than usual discomfort from such causes as a carious tooth, an abscess, a wound, a bruise +
7. *Sensitive to cold*
   Shows pallor, shivering, seeks the fireside, bundles up unnecessarily —

8. *Easily chilled*
   Susceptible to colds, to chilblains +
9. *Sensitive to heat*
   Perspires easily. Quickly exhibits apathy, weakness, fatigue in warm temperatures +
10. *Sensitive to physical fatigue*
    Shows early signs of fatigue in active games, when walking, when doing manual work. Needs much sleep —
11. *Sensitive to stale air*
    Evinces signs of discomfort in a confined space, in crowded rooms —
12. *Desires cleanliness*
    Dislikes to get dirty, keeps person clean, keeps clothing clean. Avoids mud, puddles. Keeps hands clean +
13. *Sensitive to intoxicants*
    Quickly shows effects from coffee, tobacco, alcohol, from certain foods (shell-fish, strawberries, asparagus, etc.) Eggs +
14. *Sensitive to auto-intoxications*
    Shows signs of poisoning from no apparent cause, due to the intestine, liver, or kidneys (irruptions of the skin) —
15. *Sensitive to infections*
    Signs of inflammation quickly following any wound, dental caries, etc. (abscesses and whitlow frequent) —
16. *Slow at healing*
    Wounds and bruises from accident —
17. *Loves comfort*
    Is self-indulgent, thinks of her own comfort, takes great care of herself when suffering from slight ailments +
18. *Has need of activity*
    Suffers if she must keep still —

19. *Temperament*
Sad, gay, equable, variable

II. INSTINCT OF SELF-DEVELOPMENT—TENDENCY TO SELF-ASSERTION

1. *Shows amour-propre*
Has pride in herself, in her personality, physical and mental —
2. *Ambitious*
Desires to attain the highest station —
3. *Proud*
Believes herself one of the elect —
4. *Interested in her appearance*
Thinks about it and how to improve it +
5. *Vain*
Exaggerates her importance, brags —
6. *Fond of independence*
Hates to be directed —
7. *Self-sufficient*
Does not ask help or desire it —
8. *Proud of what she can do*
Wants people to know about it +
9. *Has dignity*
Will do nothing unworthy to obtain her desires. Respects herself as a physical and moral being +
10. *Insists on her rights*
Protests if they are infringed, claims what is her due, will not allow herself to be exploited +

III. INSTINCT OF SELF-DEVELOPMENT—ACQUISITIVE TENDENCY

1. *Keeps her belongings*
Toys, books, clothing ⊕
2. *Hides or locks up her belongings* —
3. *Protests if her belongings are touched*
if any one takes them —

4. *Takes care of her belongings*
   Toys, books, clothing ⊕
5. *Orderly*
   Has she certain whims in regard to order? ∔
6. *Economical*
   Saving of her belongings, of her money +
7. *Shows avarice*
   Accumulates to no purpose —
8. *Takes things belonging to others*
   Without intention to keep them?
   Without knowing that she does so? —
9. *Covets the belongings of others* —
10. *Jealous of the advantages of others* —
11. *Takes the belongings of others*
    With intent to keep them (candies, school supplies, playthings, clothing, money, other things) —
12. *Collecting impulse*
    Stamps, picture cards, objects of value, curiosities, other objects
13. *Is provident*
    Looks out for tomorrow, for the future +
14. *Given to borrowing* —
15. *Slow about returning* what she has borrowed —
16. *Barters and sells without desire for gain*
    Exchanges things —

IV. INSTINCT OF SELF-DEVELOPMENT—TENDENCY TO SEEK EXPERIENCE—CURIOSITY

1. *Curiosity as to new sensations*
   Color, form, sounds, taste, odors +
2. *Curiosity as to ideas, knowledge*
   a) Relative to natural sciences, plants, animals, physics, chemistry ⊕

b) Relative to things of a mechanical nature
applied science, aeroplanes, automobiles, railroads, industries, etc. —

c) Relative to meteorology, astronomy, the facts of time, hour of the day, clouds, the moon, stars, etc. +

d) Relative to geography
habits and customs of divers peoples, products of different countries, travels, explorations, adventures +

e) Relative to history
lives of great men, of conquerors, of scholars, of benefactors of humanity, military history +

f) Relative to mathematics
arithmetic, algebra, geometry —

g) Relative to mythology
legends, tales, imaginative literature ⊕

h) Relative to general ideas
political, social, economic questions —

j) Relative to philosophical ideas —

k) Preferred reading
novels, travels, stories, science, history, technology, religion

3. *Curiosity as to gossip, as to details* +

V. Defensive Reactions—Passive in Character

1. *Fear of the dark* —
2. *Fear of empty places*
Entering a church, crossing an open space, skirting an open space —
3. *Fear of water* —
4. *Fear of noise* —
5. *Fear of high places*
Mountains, buildings —

6. *Fear of animals*
   What animals? Dogs
7. *Fear of strangers* —
8. *Fear of weapons* —
9. *Fear of thunder, of lightning* —
10. *Fears horrible sights*
    In reality, at the cinema, etc.?
11. *Fears pain*
    Refuses to go to the doctor, the dentist +
12. *Fears illness*
    Afraid to see people who are ill, afraid of contagion ±
13. *Fears death*
    Fears to see a corpse, even that of someone she has loved. Fears she may die —
14. *Is prudent*
    Will take no chance, no risk where she believes there may be danger +
15. *Is timid*
    Fears to call attention to herself, to be noticed ±
16. *Tells lies*
    Through fear of consequences
    Is very imaginative
17. *Dissimulates*
    Because of fear. Won't "show her hand" —
18. *Will strike in self-defense* —

*Remarks:* A. often tells petty lies. Her imagination is the sole cause of this.

VI. Defensive Reactions—Active and Aggressive

1. *Is irritable*
   Shows quickly by speech, gesture, when anyone or anything disturbs her ⊕
2. *Is impatient*
   *Id.*

3. *Is quick-tempered*
   *Id.* But more pronounced—cries, flushes ⊕
   Quickly over
4. *Is violent*
   *Id.* with blows, throws herself on the ground, strikes herself, breaks things —
5. *Is brutal*
   Takes advantage of her strength to avenge or attack —
6. *Is destructive*
   Destroys wantonly to avenge herself —
7. *Is cruel*
   Causes wanton suffering —
8. *Is brusque*
   Lacks reserve. Finds it difficult to be self-contained —
9. *Is a tease*
   Irritates others by her behavior ⊕
10. *Ridicules others*
    Irritates by what she says. Recognizes eccentricities and is critical ⊕
    Very pronounced trait
11. *Is cowardly*
    Profits by others' weakness —
12. *Tells lies*
    To injure others. To exculpate herself by accusing another —

VII. Esthetic Tendencies

1. *Loves the beautiful*
   a) In color
      paintings (museums)
   b) In form
      drawings, sculpture (museums) +
   c) In sound
      music, listening to singing, instruments, concerts, the theatre

d) In movement
movements of living beings
of objects

e) In nature
flowers, landscapes, trees, the forms of animals, of human beings +

f) In ideas
of what sort?

VIII. ETHICAL TENDENCIES

1. *Distinguishes good from evil* +
2. *Tries to do right* +
3. *Preoccupied with her own conduct,* with the consequences of her own actions —
4. *Scrupulous*
Shows more than average concern about the consequences of her own actions +
5. *Sincere, frank*
Not concerned to hide her purposes. Does not try to deceive you as to what she really thinks +
6. *Honest, fair, upright* +
7. *Has a sense of duty* ⊕
8. *Resists bad influences*
a) Bad advice
b) Bad example. Sometimes follows bad example
1) Because of apathy
2) Because she fears punishment
3) Because she fears other consequences, trouble, other people's good opinion
4) Because she desires to do right
9. *Needs moral support*
if she is to resist undesirable influences —
10. *Is facile at excuses* —

11. *Is facile at making promises*
12. *Keeps her promises*
    her engagements, her word
13. *Is repentant*
    regrets sincerely any wrong she may have done
14. *Feels remorse*
    wishes to make amends for any wrong she may have done
15. *Tries to make amends*
    when she has done wrong
16. *Has an ideal*
    a) What person does she desire to imitate?
    b) What does she desire to become?
    A farmer.
    c) What kind of life attracts her?
    Life out of doors.
    d) What calling or profession seems to her the most desirable?
    The farmer's.
    e) Which does she consider the most commendable action? The most courageous? (choice given of the following:
    To save one's enemy, to save one's brother, father, mother, a drowning child, etc.
    To work for one's family
    To endanger one's life for country, etc.)
    f) What act does she consider most degraded, infamous, cowardly?
17. *Preoccupied with her origin*
    With the beginnings of life, of all things, of the universe?
18. *Preoccupied with the other world*
    With a future life

19. *Tends to mysticism*
To giving or believing imaginative explanations as to the beginnings of things and another world —

20 *Believes*
As a matter of conviction —
As a matter of sentiment —
As a result of suggestion and imitation —
As a matter of interest —

*Remarks*: Augusta's ideal is to live close to nature.

B. Social Tendencies (Exocentric—Conservation of the Species—Altruistic Development)

I. Tendencies Related to the Sex Instinct—to be Noted Especially at Puberty and After

1. *Seeks companionship of children of the opposite sex* —
2. *Has friendships of an exaggerated and exclusive kind* —
3. *Seeks caresses*
from older people (men, women)
from children of the same sex, big or little +
4. *Gives caresses*
to older people (men, women)
to children of the same sex, of the opposite sex, big or little
5. *Exhibits precocious pubertal development*
in physical or mental characteristics —
6. *Exhibits curiosity*
regarding anything that appears related to questions of sex (acts of adults, pictures, etc.) —
7. *Displays coquetry*
of a kind that may be ascribed to the sex instinct —

8. *Displays modesty*
   Of a kind suggesting sex consciousness —
9. *Is jealous*
   does not wish the object of her affection to attract or be attracted by others —
10. *Indulges in bad habits*
    Of long standing, recent. Not responding to medical treatment, suggestions, threats, approbation, coercive measures —
11. *Talks much on matters related to sex* —
12. *Given to obscenity*
    In writing, drawing, gestures, acts, speech —

II. TENDENCIES RELATED TO THE PARENTAL INSTINCT

1. *Likes to play with dolls* +
2. *Prefers to play with younger children* —
   a) protects younger children
   b) assists them
   c) disciplines them
   d) amuses them, keeps them occupied
   e) cares for them
   f) tells them stories
   g) gives them advice

III. ELEMENTARY SOCIAL TENDENCIES—SYMPATHETIC AND GREGARIOUS

1. *Dislikes solitude*
   seeks society of others +
2. *Displays sympathy*
   unconsciously, by facial expression, etc. —
3. *Seeks sympathy, affection*
   without sexual implications
   a) likes best grown people who pay attention to her +
   b) loves her parents above others +
   c) loves her brothers and sisters above others

d) loves the servants above others
e) loves her teachers above others +

4. *Is exclusive, jealous*
without sexual implications —
5. *Is fond of presents* —
Fond of flattery +
Fond of praise —
6. *Is polite* +
7. *Is respectful* +
8. *Is obedient to her superiors* +
9. *Will obey only certain persons* —
10. *Is obliging to everyone* —
11. *Easily moved*
by tears, entreaties, threats —
12. *Permits herself to be dominated*
recognizes when she is dominated —
13. *Permits herself to be taken advantage of*
recognizes when she is taken advantage of —
14. *Ingenuous*
Takes everything at its face value. Does not know when she is taken advantage of —
15. *Forgiving*
Quickly forgets wrong done her +
16. *Exhibits pride of family*
of group, class, etc. +
17. *Stable in her affections* +

IV. Elementary Social Tendencies — Combative and Competitive

1. *Exhibits a spirit of emulation*
Sensitive to rivalry —
2. *Cannot endure to be surpassed* —
3. *Would minimize others to increase her own importance* —

4. *Determined to excel in some special respect*
   a) in physical strength
   b) in dexterity
   c) in beauty
   d) in personal adornment
   e) in wealth
   f) in family connection
   g) in intellect
   h) in high ideals
   i) in scholarship
   j) in some accomplishment
      singing, sports, use of instruments, etc. +
   k) as the possessor of certain objects
      collections +
5. *To what does she owe her prestige over others?*
   strength, physique, tact, fortune, ability to express herself —
6. *By what is she teased?*
   physical defects, intellectual, etc.

V. Elementary Social Tendencies—Imitative

1. *Tries to imitate what she sees*
   a) actions—good, undesirable
   b) attitudes, gestures, etc.
   c) peculiarities of physical appearance, coiffure, etc.
   d) costume, ornaments, etc.
   e) occupations
   f) nervous habits (tics)
   g) eccentricities
2. *Imitates or tries to imitate what she hears*
   a) language
   b) intonation
   c) ideas
3. *Is suggestible*
   in response to whom? to what?

VI. ELEMENTARY SOCIAL TENDENCIES—NEED FOR APPROBATION

(Re-action to influences exerted on conduct)

1. *Responsive to encouragement* +
2. *Has need of approbation* +
3. *Sensitive to reproof* ±
4. *Much concerned as to what others think of her* —
5. *Amenable to punishment*
   Of what kind? —
6. *Amenable to threats*
   Of what nature? —
7. *Has to be treated with gentleness* —
8. *Has to be treated with firmness* +
9. *Rebels frequently against discipline* —
10. *Will obey only certain persons*
    What persons? —
11. *Takes advantage of kindness, weakness, affection* —

VII. ELEMENTARY SOCIAL TENDENCIES—THE PLAY IMPULSE (social play)

1. *Loves to play with other children* +
2. *Prefers to play with*
   a) special individuals of her own choosing ±
   b) older children
   c) younger children
   d) children of her own age
   e) children of the opposite sex
3. *Prefers to play*
   a) active games
   b) with toys
   c) imaginative play ±
   d) quiet play
   e) noisy play

f) games involving language (word games) +
g) games of chance
h) games for stakes
i) dramatic games
j) humorous games

4. *Can organize play, games* —
5. *Will not play unless she can be leader* —
6. *Respects the rules*
Plays fair +
7. *Makes others keep the rules* +
8. *Over-anxious to win*
plays only to win —
9. *Indifferent to losing* —
10. *Will not play for money* —
11. *Stops playing if she is losing* —

VIII. Developed Social Tendencies (altruistic)

1. *Is compassionate*
Speaks with sympathy of the unfortunate +
2. *Is charitable*
By deeds exhibits sympathy with the unfortunate +
3. *Is generous*
Glad to give, gives her possessions, her money +
4. *Shows devotion*
Gives her time, her continued personal effort —
5. *Is patient*
Bears with, is ready to excuse the short-comings of others —
6. *Demands justice for others*
Protests about, revolts against, tries to remedy injustice done to others, or to secure justice for them —

7. *Is tactful*
   Avoids wounding or giving offense to others, respects their amour-propre, their dignity —
8. *Is discrete*
   Knows how to keep confidences given her. Does not seek to know intimate details of the lives of others —
9. *Recognizes and appreciates good qualities in others* ⊹
10. *Thinks of others before herself*
    family, friends, country, humanity in general —
11. *Is grateful*
    shows gratitude by her manner, speech, actions ⊹
12. *Is scrupulous about returning what has been lent her* ⊹
13. *Is ready to help*
    her parents, brothers and sisters, friends, teachers, professors, strangers (school-mates, co-citizens, compatriots) ⊹
14. *Does not expect rewards* for what she does —
15. *Fears for others* —
16. *Takes active part in defending others*
    for what reasons? —
17. *Loves animals and plants and cares for them* ⊕

C. Traits Displayed in Connection with Activities (Reflecting the affective life)

1. *Feels need of activity*
   Dislikes doing nothing, seeks to help others, finds occupation for herself ⊕
2. *By preference occupies herself with*
   a) drawing, painting, carving, modeling

3. b) singing, instrumental music
   c) writing, versifying
   d) mechanical constructions
   e) carpentry, joinery
   f) gardening, animal pets
   g) gymnastics, sports, dancing
   h) games (*see* above)
   i) sewing
   j) house-keeping
   k) other occupations collecting

3. *Likes to take walks, excursions, why?* to secure animals, plants and other specimens for her collections

4. *Manner of working*
   a) Does her school work alone
   b) under supervisions
   c) with help
   d) when stimulated, encouraged by hope of reward
   e) when forced to do it, threatened with punishment
   f) to please some one she loves, is afraid of

5. *Type of activity preferred*
   a) quiet occupation
   b) active occupation in the open

6. *Motivation of activities*
   a) personal interest, immediate or future
   b) impersonal interest, immediate or future, for a friend, the family, a school-mate, teacher, for a charitable enterprise, for strangers, etc.

7. *What does she do in her spare time?*
   a) evenings; reads

b) between periods of regular occupations; observes animals, collects specimens

c) on holidays, Sundays; during vacations; goes for walks, makes observations, investigates

8. *Active only when playing*
What kinds of games?

9. *Additional characteristics of her activities and work*

a) rapid worker +
b) accurate +
c) persevering +
d) patient +
e) shows courage +
f) exercises care ⊕
g) careful of details ⊕
h) organizes quickly +
i) shows concentration +
j) finishes what she has begun +
k) acquires new habits quickly −
l) retains habits once learned +
m) shows presence of mind −
n) exercises self-control −
o) tolerates monotonous work −
p) invents short cuts +
q) is impulsive −
r) evinces nervous habits (biting nails, etc.) −
s) displays indecision −
t) makes unnecessary movements −

## D. Intellectual Traits

(Reflecting the affective life)

1. *Amenable to reason*
Is influenced by what she believes to be the truth +

2. *Weighs questions*
Does not jump at conclusions +

3. *Is thorough*
   Not satisfied with superficial information +
4. *Methodical*
   Acquires her ideas in an orderly fashion +
5. *Follows up an idea*
   Does not jump from one idea to another +
6. *Is punctual*
   Begins and ends on time, is regular +
7. *Is concerned about losing time*
   Tries to save time +
8. *Is logical*
   Grasps ideas as presented by the facts +
9. *Is tolerant*
   Admits others need not think as she does. Knows how to listen to an opinion contrary to her own. Permits herself to be contradicted —
10. *Is arbitrary*
    Will not permit discussion of a question —
11. *Positive*
    Her opinions are straightforward, decided +
12. *Imaginative*
    Tends to ignore realities, has a predilection for the unreal, for dreaming ⊕
13. *Is creative*
    Has a faculty for making new combinations, invents new ways of solving problems —
14. *Is obtuse*
    Does not understand simple arguments —
15. *Is stubborn*
    Reluctant to change her opinions, even after she realizes she has been mistaken —

16. *Is commonplace*
    Intellectual preoccupations on a very material plane —
17. *Is critical*
    Sees and criticises the imperfections, mistakes and short-comings of others +
18. *Light-weight*
    Does not attach the necessary importance to certain facts and actions —
19. *Superficial*
    Sees only the surface, the apparent details, whatever is striking —
20. *Heedless*
    Lacks reflection, gives her answers at a guess —
21. *Humorous*
    Tends to see the funny side, to laugh +
22. *Optimistic*
    Tends to see things in a favorable light, to their advantage +

# APPENDIX C

## BIBLIOGRAPHY

### (Contributions on Pedagogical topics by Dr. Ovide Decroly)


1902 *Assistance de l'enfance anormale.* Report to the Congress of Antwerp on relief work for psychopathic families.

*Assistance et traitement des anormaux en Italie,* "La Policlinique."

*Nombre des enfants anormaux en Belgique,* "La Policlinique."

*L'écriture en miroir,* "École Nationale."

1903 *Situation des enfants anormaux en Suisse,* "La Policlinique."

1904 *Les enfants anormaux au point de vue mental.* Their treatment and their education, "La Policlinique."

*Le bégaiement.* Symptomatology, "La Policlinique."

*Observations cliniques.* Four papers written in collaboration with M. Rouma of the Department for backward and retarded children, "La Policlinique."

*La pédagogie des enfants anormaux.* Written in collaboration with Dr. Demoor. "Année psychologique."

1905 *Contribution à l'étude de l'arriération mentale.* Application of M. Binet's anthropometric standards to retarded children of Brussels.

*Notre régime scolaire prépare-t-il des anormaux?* "Ecole Nationale."

*Classification des enfants anormaux.* Report presented to the Congrès de l'éducation familiale, Liége, Sept., 1905, "Bulletin of the Société de médecine mentale."

*Organisation des établissements pour anormaux.* Report presented to the Congrès des instituteurs. Liége, Sept., 1905. Publication of the Société protectrice de l'Enfance anormale.

1906 *La psychologie du dessin,* "École Nationale."

*Quelques considérations sur la psychologie et la pédagogie de la lecture.* Written in collaboration with Mlle. Degand, "Revue Scientifique."

*Les tests de Binet et Simon pour la mesure de l'intelligence.* Critical discussion written in collaboration with Mlle. Degand. "Archives de psychologie."

*Intelligenzmessungen bei normalen und abnormalen Kindern.* Proceedings II Kongress für experimentale psychologie. Wurzburg.

*Un facteur important qui influe sur la mémoire chez les enfants et en particulier sur la mémoire visuelle, à propos de la pathologie de la lecture,* "Journal de Neurologie."

*Questionnaire pour servir à la confection du dossier médico-pédagogique,* "La Policlinique."

*Contribution au diagnostic des irrégularités mentales.* Discussion of anthropometric standards of Binet, "Journal de Neurologie."

1907 *Les tests mentaux chez l'enfant.* Report written in collaboration with Dr. Boulenger and presented at the second Congrès de Neurologie et Psychiâtrie. August, 1907.

*Ueber die Ausbildung des ärzlichen Personals der Helfsklassen und Hilfschulen,* "Monatsschrift für Kinderheilkunde."

*Contribution à la pédagogie de la lecture et de l'écriture.* Written in collaboration with Mlle. Degand, "Archives de psychologie."

*Expériences de mémoire visuelle verbale et de mémoire des images chez des enfants normaux et anormaux.* Written in collaboration with Mlle. Degand, "Année psychologique."

*La mesure de l'intelligence chez les enfants.* A second critical discussion. Written in collaboration with Mlle. Degand, "Archives internationale d'hygiène scolaire."

*La methode de la lecture et ses bases.* Written in collaboration with Mlle. Degand, "Educateur Moderne," and "École Nationale."

*La mesure des aptitudes chez les écoliers.* Report written in collaboration with M. Boulenger and M. Smelten, presented at the International Congress for school hygiene, London, August, 1907. Section of applied psychology and education.

*Principes fondamentaux de l'éducation des enfants anormaux et la notion anthropognostique chez les enfants.* Paper presented at the Congrès belge de Neurologie. Antwerp, September, 1907.

*L'éducation des enfants infirmes et estropiés.* In collaboration with Dr. Boulenger. Journal Médicale de Bruxelles.

1908 *Principes généraux relatifs au traitement des enfants irréguliers.* Bulletin of the the Société de Médecine mentale.

*Enfants anormaux.* Psycho-pathology and treatment (résumé of a summer lecture course.)

*Une Ecole dans la vie,* "École Nationale."

1909 *A propos d'un cas de tic fortement amélioré par le traitement de Titres et Brissaut combiné a l'emploi du travail manuel,* "Journal de neurologie."

*La paresse comme symptôme d'affection cerebrale.* Société royale des sciences médicales et naturelles de Bruxelles.

*Classification des enfants irréguliers et en particulier des irréguliers scolaires.* Congrès international de psychologie, Geneva.

*Les irrégularités mentales,* "La Policlinique."

*Prophylaxie et traitement de l'enfance anormale. Le rôle du médecin,* "La Policlinique."

*Faits de psychologie individuelle et de psychologie expérimen-*

*tale.* Written in collaboration with Mlle. Degand, "École Nationale," 1909-10.

*La lecture élémentaire.* Report written in collaboration with Mlle. Degand and presented at the general meeting of the Société belge de pédotechnie, Dec. 20, 1909.

1910 *Psychologie de la lecture* and *La lecture comme facteur du development intellectuelle.* Reports written in collaboration with Mlle. Degand and presented at the general meeting of the Société belge de pédotechnie. Zuid en Noord.

1911 *Diagnostic entre la démence et l'idiotie.* Société de médecine mentale Vanderhagen, Ghent.

*Observations relatives au développement de la notion chromatique.* Written in collaboration with Mlle. Degand, "École Nationale."

1912 *Questionnaire pour l'examen des enfants anormaux.* La Policlinique. Written in collaboration with Dr. Henrotin.

*La psychologie du dessin, le développement de l'aptitude graphique.* Paper for the Société belge de neurologie.

*Quantités continues et discontinues chez l'enfant.* Written in collaboration with Mlle. Degand, "Archives d'hygiène scolaire."

1913 *Tests se rapportant à la notion de nombre.* Written in collaboration with Mlle. Degand, "École Nationale."

*Observations relatives au développement de la notion de temps chez une petite fille de la naissance à cinq ans.* Written in collaboration with Mlle. Degand, Archives de psychologie.

*Examen mental des délinquents juveniles à propos des rapports de l'anormalité et de l'enfance abandonée.* Paper for the Congrès international de la protection de l'enfance.

*Examen mental des enfants anormaux.* Congrès de neurologie, Ghent.

*Les classes homogènes et l'examen mentale,* Revue de pédotechnie.

1914 *Epreuves nouvelles pour l'examen mental et son application aux* enfants anormaux, Année Psychologique, 1914, and Bulletin Société d'anthropologie, 1913.

*La notion de nombre chez les enfants.* Written in collaboration with Mlle. Deschamps, Revue de Pédotechnie.

*L'initiation a l'Activité intellectuelle et motrice par les jeux éducatifs.* Written in collaboration with Mlle. Monchamp. Collection d'actualités pedagogiques. Delachaux and Niestlé, Neuchâtel, Switzerland [pp. 150].

*Le rôle du médecin dans l'orientation professionnelle,* La Policlinique.

1921 *Séméiologie psychologique de l'affectivité et particulièrement de l'affectivité enfantine.* In collaboration with Dr. Vermeylen. Imprimérie médicale et scientifique, Brussels.

*Vers l'Ecole rénovée.* In collaboration with G. Boon. Office de publicité, Bruxelles [pp. 48].

*Abozzo di un programma applicato in una scuola sperimentale.* Revista di psicologia de Ferrari [Jan.].

1923 *Comment l'education, Intellectuelle contribue a sublimer les tendances.* Pour l'Ére Nouvelle [Oct.].

*L'Examen affectif chez l'enfant.* Imprimérie médicale et scientifique, Brussels.

*Fonction de globalisation et applications pedagogiques.* Rivista di pedagogia de Madrid [Dec.].

*Les Applications américaines de la Psychologie à l'organization humaines et à l'éducation.* Written in collaboration with R. Buyse, Lamartin, Brussels [pp. 56].

1924 *Les Interêts de l'énfant et le Programme de l'École Primaire,* Journal de Psychologie [Nos. 1-3].

*Causeries faites par M. le Dr. Decroly* ("Conferences at Anderlecht"), published in *Essai d'application de la Méthode Decroly dans l'enseignment primaire,* by G. Boon, Office de Publicité, Brussels [pp. 94].

*La Pédagogie Universitaire aux États-Unis.* Written in collaboration with R. Buyse, reprint from La Révue à l'Université de Bruxelles [Nos. 3-4], Société Anonym, M. Weissenbruch, Brussels [pp. 43].

*Les Mieux Doués.* Paper for the Société belge d'eugénique. Bulletin international de la Protection de l'Enfance. [Oct.].

# INDEX

# INDEX


Activities, 8, 17, 22-24, 95, 96
  children's, 96-97, 106. *See also* Outline for Preparation of Lessons.
Affective responses, XII
Affectivity, X
  questionnaire on, 145, 283-305
Ages, pupils', 108
Analysis
  in reading, 61, 62, 66
  of reading act, 59
  of language, 63
Anderlecht
  experiment at, 284
  conferences cited, 12, 48, 56, 180
Animal world, 209, 209-210, 217, 218-219, 225-229
Animal pets, 30, 49, 97
Animals for observation, 217-218
Annie, report of, 100-103
Arithmetic, 138-139, 157-158. *See also* Number, Measurement
Art, education as, XXVII
  of teaching, XXVIII
Associated ideas, program of, 16, 17, 19, 24. *See also* Decroly program
Association, 22-24, 41-46, 111, 139-141
  Dewey cited, 39
  *See also* Type programs
Attention,
  and device materials, 80
  tests of, 67. *See also* Mental Measurements
Attitude, XIII
Auditory type, 67, 68
Augusta, 133-146, 276-277, 286-305

Bakery, trip to, 44
Binet, XIV, XXIII
Binet tests, 108, 142, 143-144, 158, 160-161, 174, 176
Books for first grade use, 72
  made by children, 89
Branches of instruction, X, 18, 25, 236
Bread, study of, 43-44

Candle, 45-46
Centers of interest, 24, 25, 124, 182-185
Charts, making of, 115, 116-117, 129
Child, the
  and defense, 217
  and his environment, 25
  and knowledge, 19
  and society, 19, 21, 214-215
  and the family, 21, 25, 213
  and the school, 215-216
  study organized about, 21
Children's
  conclusions, 41. *See also* Generalization, Synthesis
  drawings, 35, 53, 117, 141, 158
  interests, 12, 16, 17, 18, 32-33, 106
  specimens, 50, 53
Class
  group, 15, 108
  conferences, 17, 113, 117-120
  responsibilities, 97-98
Classifying objects, 30
Clothing, 115, 188-190
Coal and wood, 196-200
Co-education, XIV, 8, 14
Collections, children's own, 53
Commands, use in reading, 63-64, 74
Community school as a, 95, 96-98
Comparison, 22-23, 30, 32, 33, 36, 44-45, 70, 98, 236
  in reading, 70, 76, 78, 80
  of judgments, 22-23
  of workmanship, 45
  wax and tallow candle, 45

Composition, children's, 31, 91, 117-118, 121-123, 124-126, 136-138, 152-157, 162-173
Comprehension and manual occupations, 95
Conclusions, children's, 41
general, 31. *See also* Generalization
Conferences, Class, 17, 113, 117-120
Conscience, education of, 98
Correlation of activities, 18
Country day school, XIV, 14
Course of study, 19, 181
Creativeness in teaching, XXVIII
Criticism of Decroly plan, XXV, 68-70, 73, 104
Curiosity, 41
Curriculum, X, 3, 12, 18, 19

Decroly
classes, 5-6, 6-8
Institute, 23, 235
program, XI, 17, 19, 24
teaching, IX, X, XI
tests, 108, 142-143, 144-146, 159, 161, 175, 176
Decroly, Ovide
biographical outline, 1-3
cited, XII, XIII, XXX, 12, 48, 94, 106, 132, 180, 232
contributed papers, 306-309
pedagogical contribution, XXIII
research studies, XXII
Defense, 184, 205, 217-220
Descoeudres, Mlle., XXIV, 68-70, 73
Determinism, 46, 197, 201, 203-204, 223, 226-227
Dewey, John, XXIV, 235
cited, 28, 39
Device materials, XXIII, 80
Dictation exercises, 91-92, 127, 134-135, 151-152
Discipline, XIV, 13, 16, 95, 97, 98
Drawing, XXII, 31, 81, 141-142, 152
as pre-writing experience, 81
Drawings, children's, 35, 53, 117, 141, 158
Duvillard, discussion of reading, 72

École de l'Ermitage, 1, 4-5, 72
Education, as an art, XXVII
and social reform, 18
freedom in, X
purpose of, 19
method in, XXVII
social, 46, 95-104
Elaboration, 23, 30
Elementary School C., 5-6, 43, 107-108, 233
Environment, XIII, 12, 13, 16, 19, 21, 96, 106, 180, 185
Evolution, 29
Exceptional children, 2, 3, 15, 235
Excursions and visits, 16, 30
Experiences, types of school, 22-24
sensory, 30, 31
Expression, 23-24, 49-53, 111-112

Family, the, 21, 25, 213
Ferriere, Ad., cited, 8, 9, 95
"Fifteen points," program of, 13-17
Fire, 221-225
Flowers, 190-192
Food, 182-183, 186-188, 195-196
Freedom, X, XXIII, 96-97, 235
physical, XIV, 16, 99
Free work, 51, 81
French language, 67, 91
Fruits, 186-188
Fuel, 196-200, 212
Fundamental needs, XI, 20, 25

Games, XXIV, 15, 62, 76-80, 77, 80, 86, 88, 162, 235, 236
reading, 62, 76-80
Gardens, 49
General ideas, 23, 221. *See* Outline for Preparation of Lessons
Generalization, 28, 30, 31
in reading, 61, 66, 70
facilitating, 70, 71

Geography, 24
Graphs, use of, 31, 35, 114-117
  teachers' judgment, 275-282
Group work, 80, 96

Habits, 73, 95, 106
Hand, the, 207-208
Hearing, development of, 60
Hélène, 146-173, 278-279
History, 24
Home, relations to school, 16, 99
Homogeneity. of class group, 15

Ideas, elaboration of, 28, 30
  general, 23, 221
  pivotal, 24
Ideals, 98
Ideo-visual methods, XIV, 24, 57-91
  objections to, 68-70, 73
Illustrations, 58, 87
Illustrative materials, 42, 50-53, 119, 129
Image, visual, 61, 68
  auditory, 61
Imagination, 41
Imitation, XIII, 106
Incentives, 15, 96
Incidental lessons, 29-30, 36, 46
Individual
  functions, 20
  interests, 146
  work, 95
Initiative, 96
Instincts, 94, 106, 132. *See also* Questionnaire on Affectivity
Intelligence, measurement of, XXII
  *See* Mental Measurements
Interest, 17, 32, 32-33, 185. *See also* Centers of Interest
Interests,
  Children's, 12, 16, 17, 18, 32-33, 106
  individual, 146

Judgment, and manual occupations, 95
Judgments
  comparison of, 23
  formation of, 22, 36, 63

Kerschensteiner, XXIV
Knowledge, 19, 180

Language development, 185
Languages, foreign, 16
Lessons, home study, 116
  nature and object, 23
  preparation of, 30, 221-229
  sequence of, 31
Letters, 61, 63, 73, 236
Ligthart, XXIII
Literature for first grade children, 72-73

Man, and defense, 217-220
  and work, 210, 212-213
  movements of, 206-208
  needs of, 20, 205-206
  study of, 19, 20
Manual activities, 24, 49, 95
Manual labor, 45
Manual projects
  bread making, 43-44
  brick house, 44
  spoons, 45
  village, 45
Marks, 98
Measurement, 32-37, 186-187, 188-189, 190-191, 193, 195, 197-198, 200-201, 203, 224-225, 228-229
  and comparison, 36
  of properties, 37
Memorizations, verbal, 24
Mental age, pupils, 108
Mental Measurements, 142-146, 158-161, 174-175, 176
Method, scientific, XIII
  project, XIII
Methods, ideo-visual, XIV, ~~24~~, ~~57-91~~
  of instruction, 17
  of presentation, ~~181~~. *See also* Outline for Preparation of lessons
Mineral world, 211-213
  and defense, 219
Modeling, as pre-writing experience, 81
Montessori, XXIII, 3, 234-237

Moral conclusions, 41, 43
education, 46, 98
Morale, 95
Mother tongue, 12, 24
Movement, 206-213

Needs, fundamental, XI, 20, 21-22, 106
New School League, 4
Note-books, 31, 50, 53, 79, 87, 90, 117, 119, 139-141
Number, XXII, 24, 33-37, 128, 138-139
concepts, 33-34
complex operations, 36
Decroly games, 34, 37
ideas of, XXII
*See also* Measurements, Arithmetic

Observation, 21, 21-24, 29-30, 32, 40, 79, 80, 110, 119, 139, 236
and perception, 32
and relationships, 40
incidental lessons, 29-30
Dewey cited, 28
*See also* Type Programs and Outline for Preparation of Lessons
Observations, teachers', 14, 99
Organization of subject matter, XI, 15, 24, 25. *See also* Decroly Program, Type Programs, and Outline for Preparation of Lessons
Orientation,
in social life, 96
in world citizenship, XII
Outline for Preparation of Lessons, 221-229

Parents, Co-operation of, 5, 16, 99
Pearson, Karl, XIII
Pedagogy,
natural vrs. logical, 12
of reading, 65
Perception, 32, 35, 56, 58
Pictures, 51-52, 53
Plants, 110-113, 190-192, 200-201, 211, 217, 219-220
Play, XXIV
Preparation of lessons, 30, 221-229
Pre-writing experiences, 81
Primitive life, 43
Principles of Decroly teaching, IX, X, XI, 234-237
Processes of thought, 18, 23, 236
Project method, XIII
Projects, manual, 43-44, 45, 49
Program, Decroly
of associated ideas, XI, 17, 19, 24
daily, 15
Programs, organization of, 181-220
by multiple centers, 182-204
by single centers, 205-220
first year, 185, 186-195
second year, 186, 195-204
third year, 205-220
fourth year, 109-114, 205
Protection from the elements, 188, 188-190, 196-200
Pupils at Elementary School C, 107, 108

Quiescence, 96

Re-actions, defensive, 290-292
Readers, first use of, 89-90
Reading, XXII, 24, 57-91
act of, 59
analysis, 70, 83-89
commands, 63-64, 74
comparison, 70, 76, 78, 80
direct perception, 58
generalizations, 61, 63, 70
grouping, 70, 71, 83-89
history of ideo-visual methods, 57-58
individual differences in, 70, 75
labels, 75-76
memory exercise, 78, 80
postponement of, 72-73
principles of practice, 66
print and script, 83
repetitions, 77
results achieved, 71
summary of technique, 74-90

Reasoning, 30
Recapitulation by graphic methods, 114-116
Reference library, children's, 52
Reform and education, 18
Relationships, 25, 32, 33, 41, 43, 236
Repetitions, 62, 64-65, 77, 236
Reports, 99, 100-103
Rewards, 96

School,
  active, 237-238
  activities, 17, 22
  environment, 13, 16, 32
  equipment, 14
  experiences, 23-24
  excursions, 16
  plant, 18
  staff, 15
  social purpose of, 95
  techniques, 15, 72-73, 236
Schumann, Dr., cited, 73
Science, teaching of, 12
Scientific method, XIII
Self-control, 16
Self-government, 3
Self-help, 3
Self-activity, 236
Sensory experience, 23, 30, 31
Sensory types, 67, 68, 69
Séquin, 235
Sight, development of, 60
Social education, 3, 46, 95-104
Social functions, 20
Society, 19, 20, 21, 214-215, 220
Solidarity, human, 46
  in the school, 103-104
Specimens, children's, 50, 53
Speech, development of, 60-61, 63-65
Spelling, 24, 67-68, 91-92, 127-128, 134-136, 151-152
Spoons, 45
Store, children's, 37
Stories, 98
Storing the mind, 70, 96
Subject matter, X, XI, 12, 15, 18, 19, 24, 62, 65, 66, 106, 180, 236
  and reading, 62, 65, 66
  Montessori, 237
  Organization of, XI, 15, 24. *See also* Type Programs, Outline for Preparation of Lessons
Sun, the, 185, 202-204, 220
Syllabification, 86-89
Symbols, visual and auditory, 63
  analysis of, 65
  written, 66
Synthesis, 23, 31, 33, 42, 180

Teachers', judgment graphs, 275-282
  observation of children, 14, 99
  qualifications, 14
  training, 234
Techniques, acquisition of, XIV, 24, 36, 146, 221
Technology, 201-202, 204, 224, 227-228
Tendencies, 106, 132
  *See also* Questionnaire on Affectivity
Tests, arithmetic, 157
  intelligence, XIV
  for visual images, 68
  of memory and attention, 67
  number, 128
  spelling, 127
  Vaney, 127, 128, 157, 176
  *See also* under Binet, Decroly, Mental Measurements
Thinking processes, 18, 23, 236
Time, ideas of, XXII
  use of clock, 37
  *See also* under Association
Tool subjects, X, 72-73, 236
  *See also* techniques
Traits displayed in activities, 301-305
Trips, 16, 44
Types of activity, 25
Types, sensory, 67, 68, 69
Type Programs, 182-220

Units of measure and comparison, 33, 35

Vaney scale, 127, 128, 157, 175
Visits, 16, 44

Visual, attention tests, 67
image, 61-68, 81-83
memory, 67, 68
methods, 62
symbols, 63
types, 67
Vocabulary study, 87, 111-112, 119, 128, 192, 194, 199, 202, 204, 236

Water, 195-196
Weighing, 35, 37
Word analysis, 84, 85, 88-89
Word-sentence, 61
Word-sentence method, XIV
Wood and coal, 96-100
Writing, 61-62, 79, 80-83

Yvonne, 173-177, 280-281